

**DELTA NETWORK PTE LTD****FCC CERTIFICATION
TEST REPORT**

Prepared For :	DELTA NETWORK PTE LTD 21 Bukit Batok Crescent #23-72 Wcega Tower, Singapore 658065
Product Name:	ALVO Smartpad
Trade Name	DELTA
Model :	ALVO SmartPAD 2, ALVO Smartpad
FCC ID	Z6PALVOSMARTPAD2
Prepared By :	DongGuan Precise Testing Service Co.,Ltd.
	F616A Room, 6th Floor, Meixin Business Center, Dongcheng Middle Road, Dongguan, Guangdong, China
Test Date:	Apr.15, 2012 ~ Apr.19, 2012
Date of Report :	Apr.20, 2012
Report No.:	PT1201136040E



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1 TEST CERTIFICATION

Product: ALVO Smartpad

Model: ALVO SmartPAD 2, ALVO Smartpad

Trade Mark: DELTA

FCC ID : Z6PALVOSMARTPAD2

Applicant: DELTA NETWORK PTE LTD
21 Bukit Batok Crescent #23-72 Wcega Tower, Singapore 658065

Factory: DELTA NETWORK PTE LTD
21 Bukit Batok Crescent #23-72 Wcega Tower, Singapore 658065

Tested Date: Apr.15, 2012 ~ Apr.19, 2012

Test Standard Used: FCC Rules and Regulations Part 15 Subpart C: 2010

Test procedure used: ANSI C63.10:2009, ANSI C63.4:2009, KDB558074

We Declare:

The equipment described above is tested by DongGuan Precise Testing Service Co.,Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and DongGuan Precise Testing Service Co.,Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC standards.

Prepared by : Jones Song
Assistant

Reviewer : : Hellen xiao
Supervisor

Approved &
Authorized Signer :

Jacky Ou / Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of DongGuan Precise Testing

Service Co., Ltd.

DongGuan Precise Testing Service Co.,Ltd.

F616A Room, 6th Floor, Meixin Business Center, Dongcheng Middle Road, Dongguan, Guangdong, China
Tel: 86-769-23368601 Fax: 86-769-23368602 [http:// www.pts-testing.com](http://www.pts-testing.com)



2 GENERAL INFORMATION

2.1. SUMMARY OF TEST RESULTS

The EUT have been tested according to the applicable standards as referenced below.		
Description of Test Item	Standard	Results
Peak Output Power	FCC Part 15: 15.247 KDB558074	PASS
6dB Bandwidth	FCC Part 15: 15.247 KDB558074	PASS
Power Spectral Density	FCC Part 15: 15.247 KDB558074	PASS
Conducted spurious emissions	FCC Part 15: 15.247 KDB558074	PASS
Radiated Emission	FCC Part 15: 15.209 FCC Part 15: 15.247 ANSI C63.10: 2009 KDB558074	PASS
Band Edge Compliance	FCC Part 15: 15.209 FCC Part 15: 15.247 ANSI C63.10: 2009 KDB558074	PASS
Power Line Conducted Emission	FCC Part 15: 15.207 ANSI C63.10: 2009	PASS
Antenna requirement	FCC Part 15: 15.203	PASS



2.2. EUT DESCRIPTION

EUT* Name	:	ALVO Smartpad
Model Number	:	ALVO SmartPAD 2, ALVO Smartpad
Difference of Model number	:	Same Motherboard, except for different model names and appearance
EUT function description	:	Please reference user manual of this device
Power supply	:	DC 3.7V from internal battery and DC 5V from external power adapter
Trade mark	:	DELTA
FCC ID	:	Z6PALVOSMARTPAD2
Radio Technology	:	IEEE802.11b/g/n
FCC Operation frequency	:	IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE 802.11n HT20: 2412MHz—2462MHz IEEE 802.11n HT40: 2422MHz—2452MHz
Modulation	:	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)
Antenna Type	:	Patch Antenna, 3dBi maximum gain
Date of Receipt	:	2012/04/16
Sample Type	:	Series production

Note: EUT is the ab. of equipment under test.

2.3. ACCESSORIES OF EUT

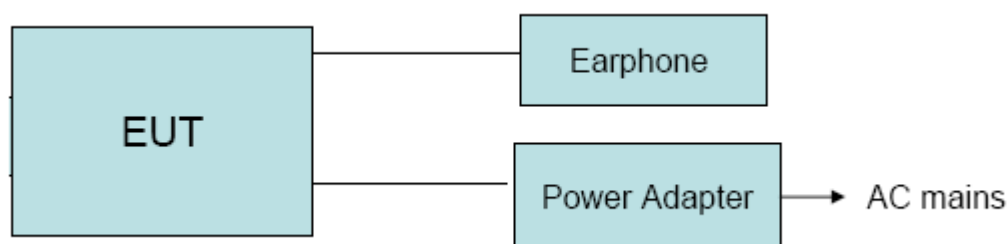
Description of Accessories	Manufacturer	Model number or Type	Other
USB Cable	/	/	1m, Unshielded
Earphone	/	/	1.5m, Unshielded
Power Adapter	Shenzhen Huoniu Technology Co., Ltd.	HND050200E	1.5m



2.4. ASSISTANT EQUIPMENT USED FOR TEST

Description of Assistant equipment	Manufacturer	Model number or Type	Other
/	/	/	/

2.5. BLOCK DIAGRAM OF EUT CONFIGURATION FOR TEST



2.6. TEST MODE DESCRIPTION

A special test software was used to control EUT work in Continuous TX mode (100% duty cycle), and select test channel, wireless mode and data rate.

Tested mode, channel, and data rate information			
Mode	data rate (Mbps) (see Note)	Channel	Frequency (MHz)
IEEE 802.11b	2	Low :CH1	2412
	2	Middle: CH6	2437
	2	High: CH11	2462
IEEE 802.11g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	High: CH11	2462
IEEE 802.11n HT20	6.5	Low :CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
IEEE 802.11n HT40	13.5	Low :CH1	2422
	13.5	Middle: CH4	2437
	13.5	High: CH7	2452
Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.			



2.7. TEST ENVIRONMENT CONDITIONS

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	21-25°C
Humidity range:	40-75%
Pressure range:	86-106kPa

2.8. TEST LABORATORY

Dongguan Dongdian Testing Service Co., Ltd.

Add: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808

Tel: +86-0769-22891499

FCC Registration Number: 270092

2.9. MEASUREMENT UNCERTAINTY

Item	MU	Remark
Uncertainty for Power point Conducted Emissions Test	2.42dB	
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	2.54dB	Polarize: V
	3.1dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	2.08dB	Polarize: H
	2.56dB	Polarize: V
Uncertainty for radio frequency	1×10 ⁻⁹	
Uncertainty for conducted RF Power	0.65dB	
Uncertainty for temperature	0.2°C	
Uncertainty for humidity	1%	
Uncertainty for DC and low frequency voltages	0.06%	

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

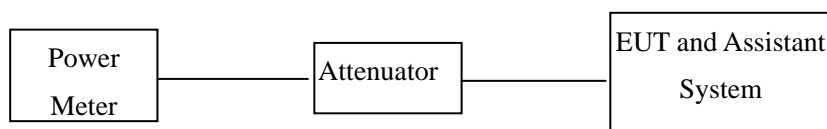


3 PEAK OUTPUT POWER

3.1. TEST EQUIPMENT

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum analyzer	R&S	FSU	1166.1660.26	2011/11/23	1Y
2	Power meter	Anritsu	ML2487A	6K00002121	2011/11/23	1Y
3	Power sensor	Anritsu	MA2491A	0033132	2011/11/23	1Y
4	Attenuator	Mini-Circuits	BW-S10W2	101109	2011/11/23	1 Y
5	RF Cable	Micable	C10-01-01-1	100309	2011/11/23	1 Y

3.2. BLOCK DIAGRAM OF TEST SETUP



3.3. LIMITS

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.4. TEST PROCEDURE

- (1) Configure EUT and assistant system according clause 2.5 and 3.2
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable and through a 20dB attenuator.
- (3) Configure EUT work in test mode as stated in clause 2.6
- (4) Measure out each mode and each bands average output power and peak output power of EUT use the test procedure described in KDB558074 clause 5.2.1.2:Measurement Procedure PK2.
- (5) Note: The attenuator loss and cable loss was inputted into spectrum analyzer as amplitude offset.



3.5. TEST RESULT

EUT: ALVO Smartpad
M/N: ALVO SmartPAD 2
Test date:2012/04/18
Tested by: TaTa Chen

Cable loss: 0.6 dB		Attenuator loss: 20 dB		Antenna Gain:3dBi	
Mode	CH	Result		Limit	Margin
		Average Output Power(dBm)	PK Output Power(dBm)	dBm	dB
11b	CH1	9.30	13.34	30	16.66
	CH6	9.89	13.20	30	16.80
	CH11	9.56	12.67	30	17.33
11g	CH1	9.21	15.89	30	14.11
	CH6	9.01	15.45	30	14.55
	CH11	9.78	15.11	30	14.89
11n HT20	CH1	9.02	16.21	30	13.79
	CH6	9.78	16.01	30	13.99
	CH11	9.56	16.10	30	13.90
11n HT40	CH1	9.50	16.50	30	13.50
	CH4	9.45	16.21	30	13.79
	CH7	9.21	16.02	30	13.98
Conclusion: PASS					

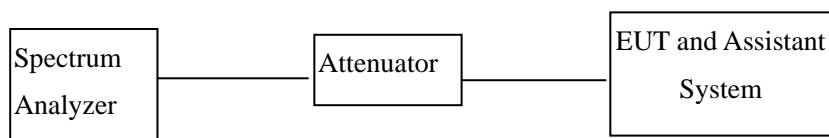


4 6DB BANDWIDTH

4.1. TEST EQUIPMENT

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum analyzer	R&S	FSU	1166.1660.26	2011/11/23	1Y
2	Attenuator	Mini-Circuits	BW-S10W2	101109	2011/11/23	1 Y
3	RF Cable	Micable	C10-01-01-1	100309	2011/11/23	1 Y

4.2. BLOCK DIAGRAM OF TEST SETUP



4.3. LIMITS

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500 KHz.

4.4. TEST PROCEDURE

- (1) Configure EUT and assistant system according clause 2.5 and 4.2
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable and though a 20dB attenuator.
- (3) Configure EUT work in test mode as stated in clause 2.5.
- (4) The bandwidth of the fundamental frequency was measured by spectrum analyzer use the test procedure described in KDB558074 clause 5.1.2: Alternate EBW Measurement procedure.

EUT: ALVO Smartpad	
M/N: ALVO SmartPAD 2	
Test date:2012/04/18	Tested by: TaTa Chen

Mode	CH	Result(MHz)	Limit
11b	CH1	12.00	>500KHz
	CH6	12.00	>500KHz
	CH11	12.00	>500KHz



11g	CH1	16.50	>500KHz
	CH6	16.50	>500KHz
	CH11	16.50	>500KHz
11n HT20	CH1	17.67	>500KHz
	CH6	17.67	>500KHz
	CH11	17.83	>500KHz
11n HT40	CH1	36.40	>500KHz
	CH4	36.40	>500KHz
	CH7	35.90	>500KHz
Conclusion: PASS			

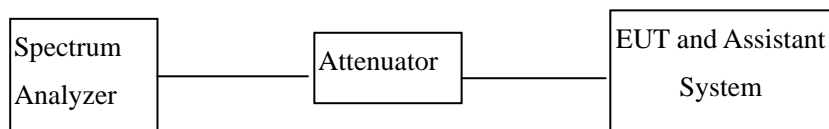


5 POWER SPECTRAL DENSITY

5.1. TEST EQUIPMENT

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum analyzer	R&S	FSU	1166.1660.26	2011/11/23	1Y
2	Attenuator	Mini-Circuits	BW-S10W2	101109	2011/11/23	1 Y
3	RF Cable	Micable	C10-01-01-1	100309	2011/11/23	1 Y

5.2. BLOCK DIAGRAM OF TEST SETUP



5.3. LIMITS

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

5.4. TEST PROCEDURE

- (1) Configure EUT and assistant system according clause 2.5 and 5.2
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable and though a 20dB attenuator.
- (3) Configure EUT work in test mode as stated in clause 2.6
- (4) use the test procedure described in KDB558074 clause 5.3.1:measurement procedure PKPSD to measure out each test modes and channel's power density with 3KHz.

Note: The cable loss and attenuator loss were offset into measure device as amplitude offset.



5.5. TEST RESULT

EUT: ALVO Smartpad
M/N: ALVO SmartPAD 2
Test date:2012/04/18
Tested by: TaTa Chen

Mode	CH	Measured Level (dBm/100KHz)	Power density (dBm/3KHz)	Limit (dBm/3KHz)
11b	CH1	12.10	-3.10	8.00
	CH6	12.52	-2.68	8.00
	CH11	10.92	-4.28	8.00
11g	CH1	6.94	-8.26	8.00
	CH6	6.75	-8.45	8.00
	CH11	6.73	-8.47	8.00
11n HT20	CH1	6.15	-9.05	8.00
	CH6	6.25	-8.95	8.00
	CH11	6.06	-9.14	8.00
11n HT40	CH1	3.61	-11.59	8.00
	CH4	3.23	-11.97	8.00
	CH7	3.12	-12.08	8.00

Note: Power density = Measured level – BWCF

BWCF(bandwidth correction factor) = $10\log(3\text{KHz}/100\text{KHz}) = -15.2\text{dB}$

Conclusion: **PASS**

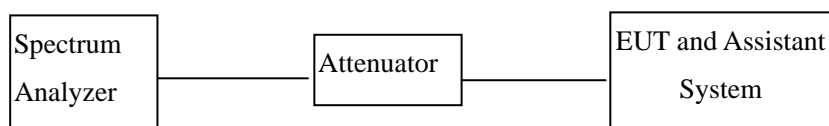


6 CONDUCTED SPURIOUS EMISSIONS

6.1. TEST EQUIPMENT

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum analyzer	R&S	FSU	1166.1660.26	2011/11/23	1Y
2	Attenuator	Mini-Circuits	BW-S10W2	101109	2011/11/23	1 Y
3	RF Cable	Micable	C10-01-01-1	100309	2011/11/23	1 Y

6.2. BLOCK DIAGRAM OF TEST SETUP



6.3. LIMITS

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

6.4. TEST PROCEDURE

- (1) Configure EUT and assistant system according clause 2.5 and 6.2
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable and through a 10dB attenuator.
- (3) Configure EUT work in test mode as stated in clause 2.6
- (4) use the test procedure described in KDB558074 clause 5.4.1 to measure out all the emissions of device.
- (5) Note: The attenuator loss was inputted into spectrum analyzer as amplitude offset.



6.5. TEST RESULT

EUT: ALVO Smartpad	
M/N: ALVO SmartPAD 2	
Test date:2012/04/18	Tested by: TaTa Chen

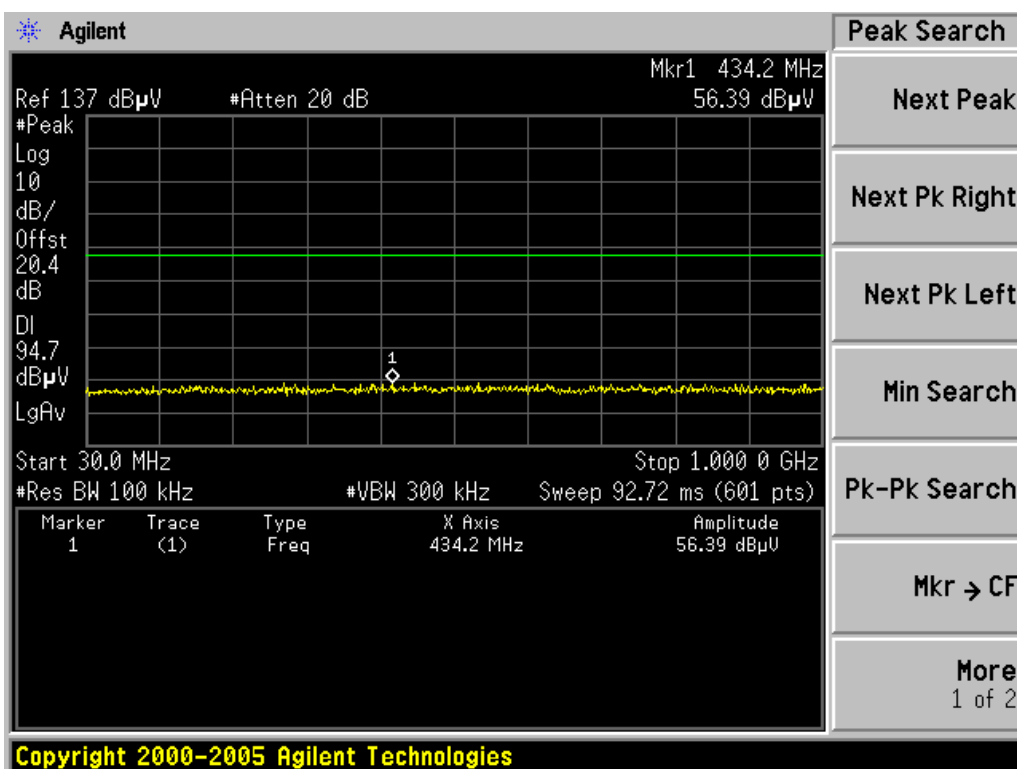
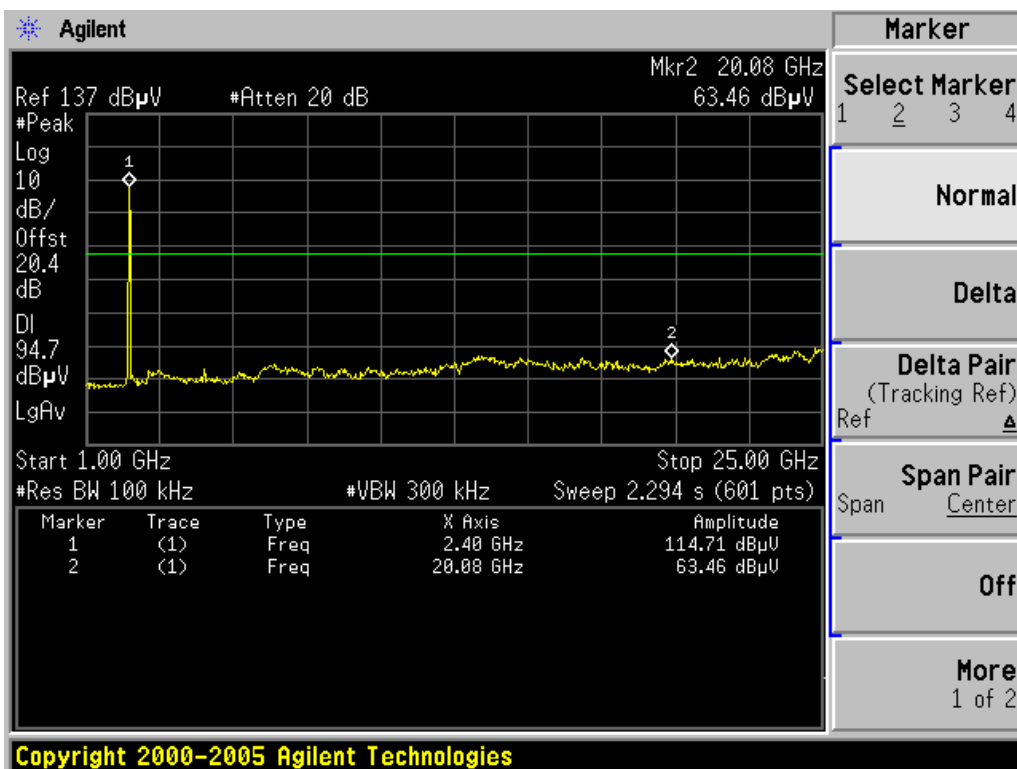
Mode	CH	Conducted emissions test result
11b	CH1	PASS
	CH6	PASS
	CH11	PASS
11g	CH1	PASS
	CH6	PASS
	CH11	PASS
11n HT20	CH1	PASS
	CH6	PASS
	CH11	PASS
11n HT40	CH1	PASS
	CH4	PASS
	CH7	PASS

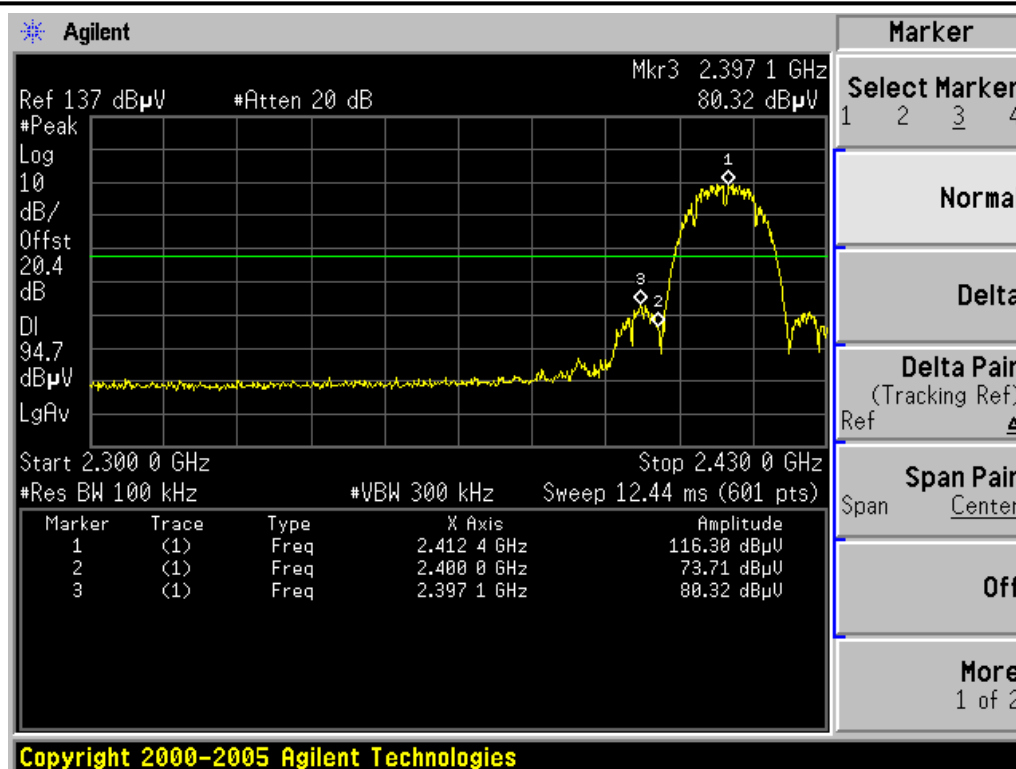
6.6. ORRGINAL TEST DATA

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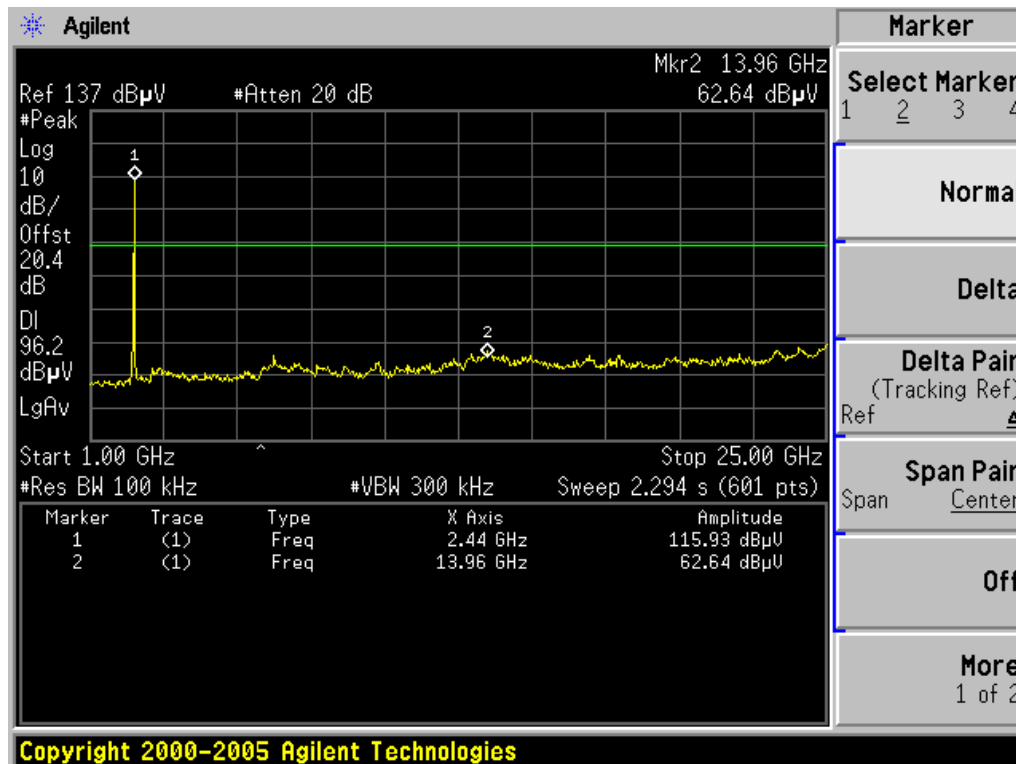


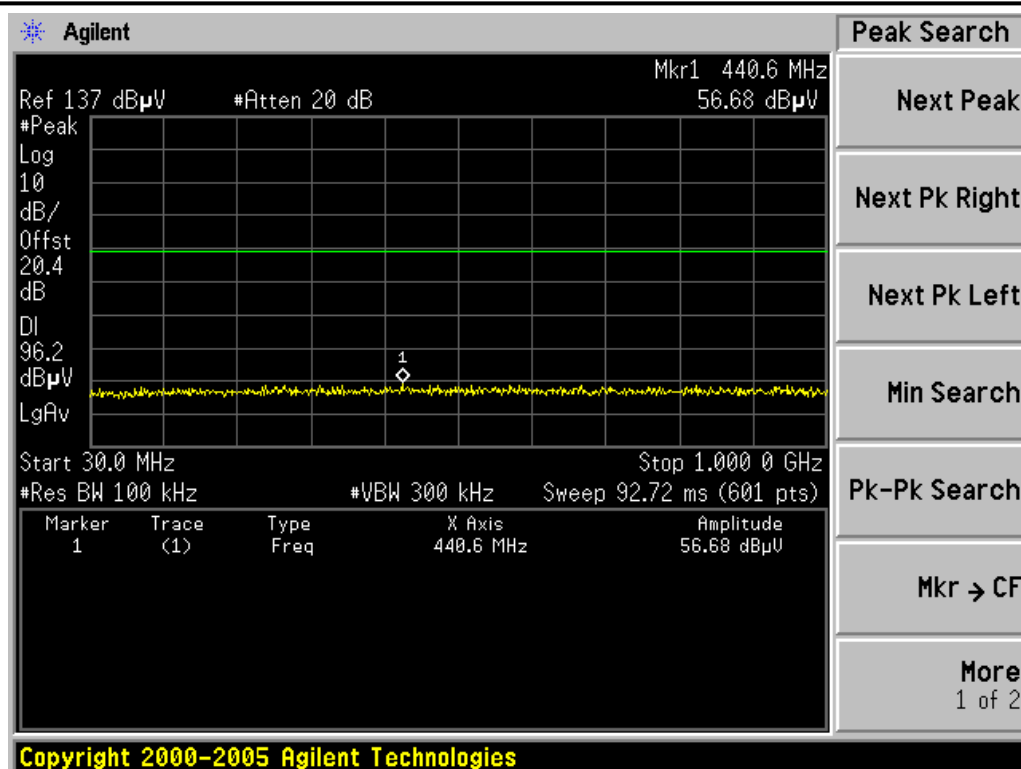
IEEE 802.11b CH1:



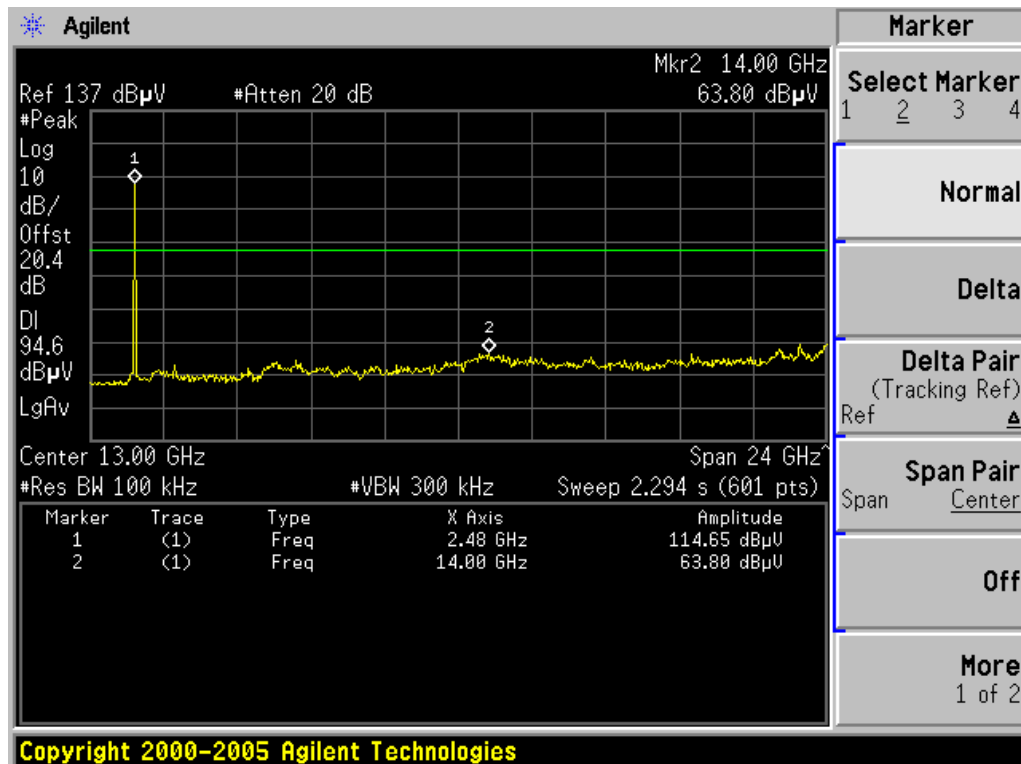


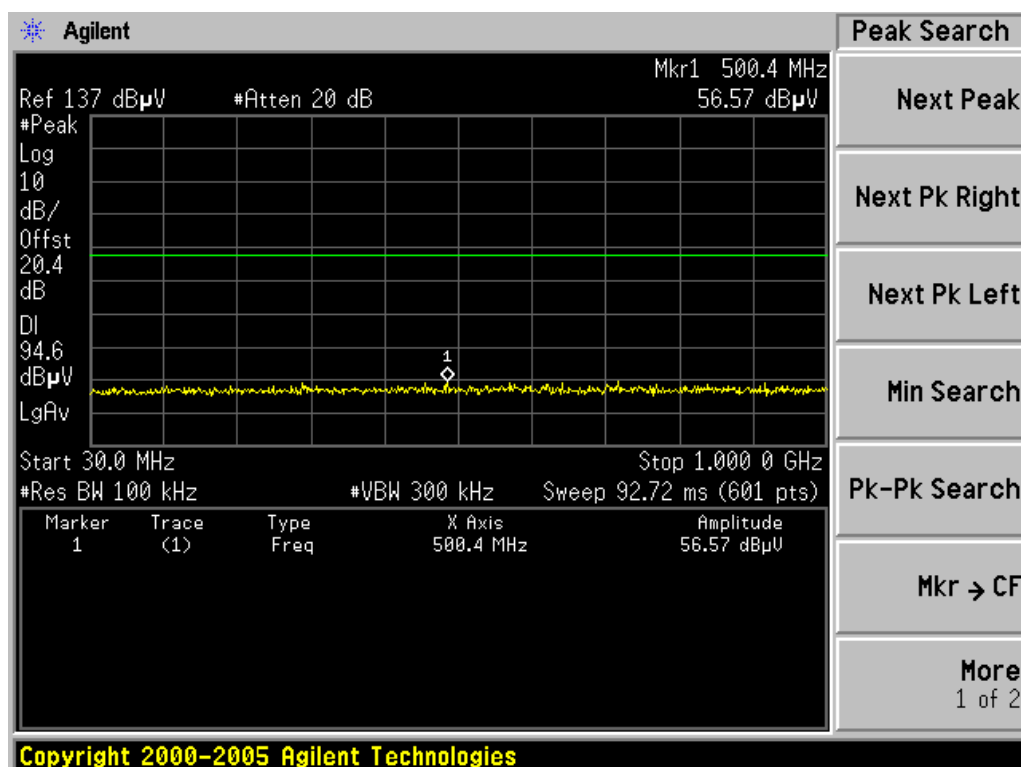
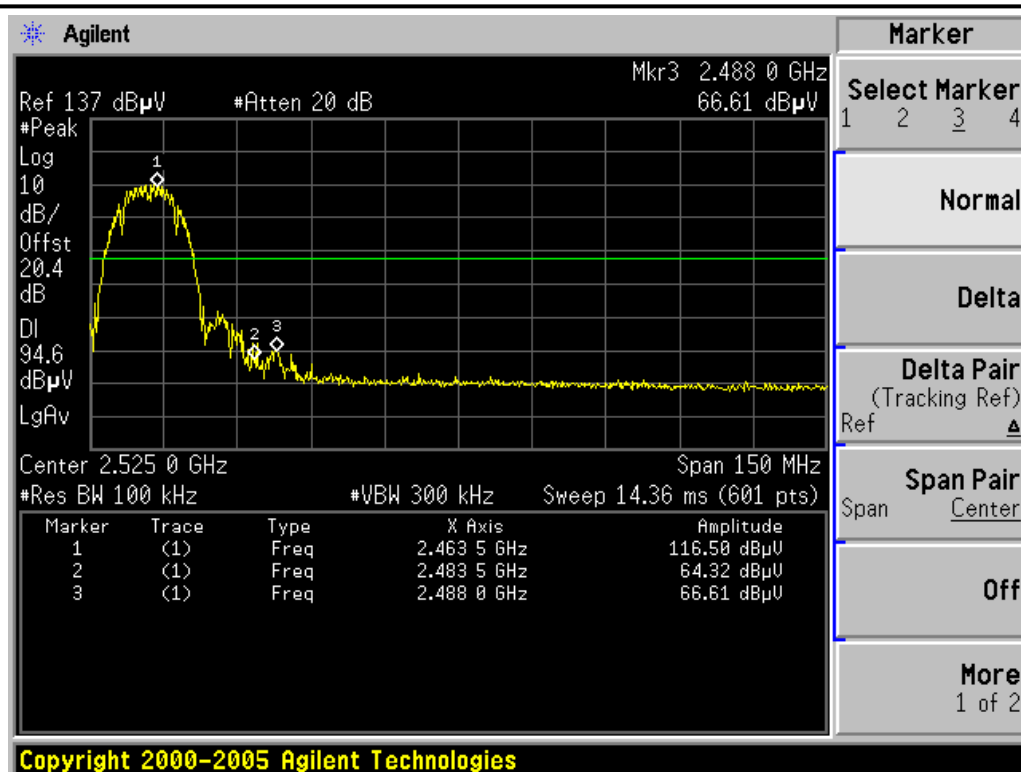
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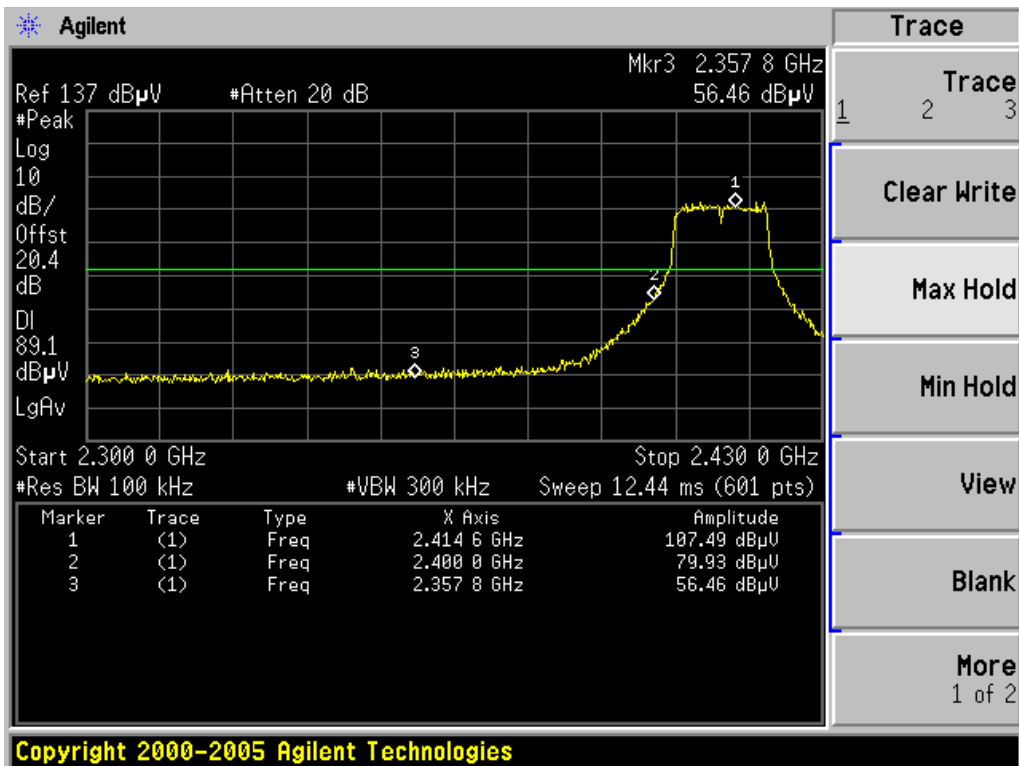
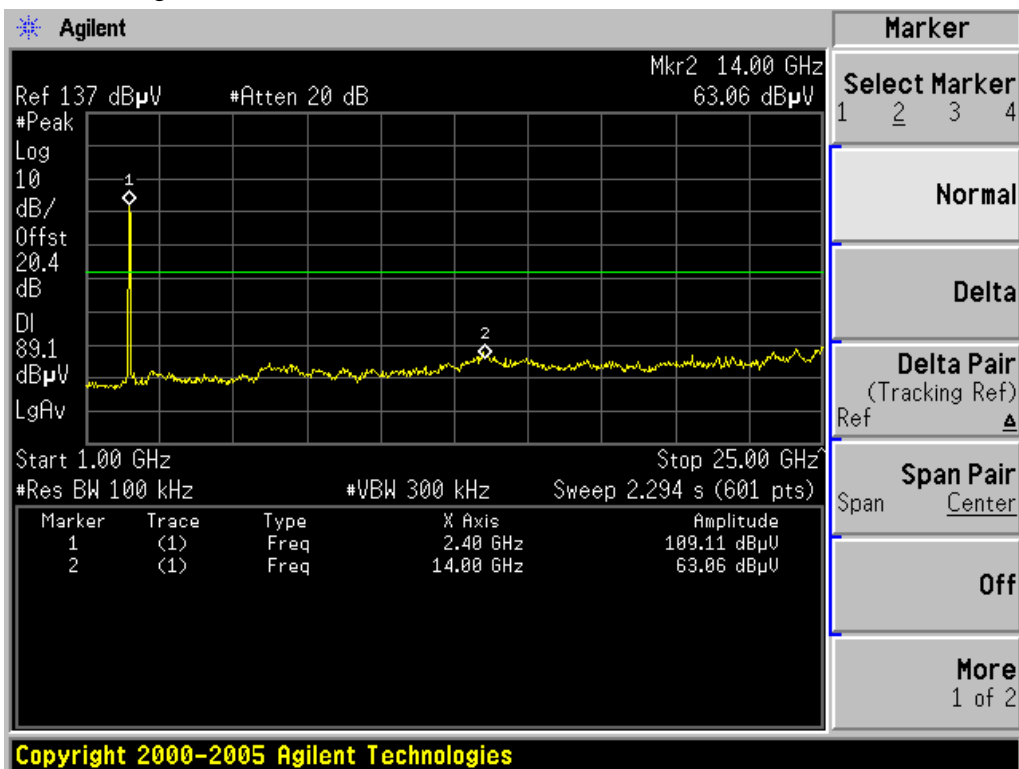
IEEE 802.11b CH11:

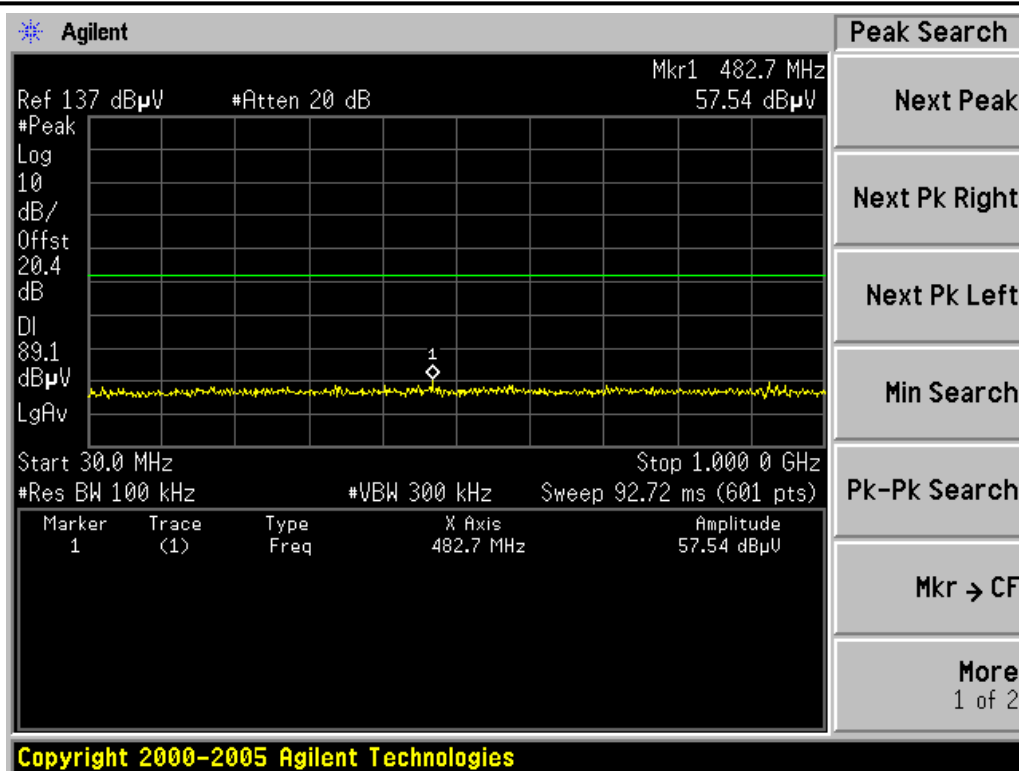




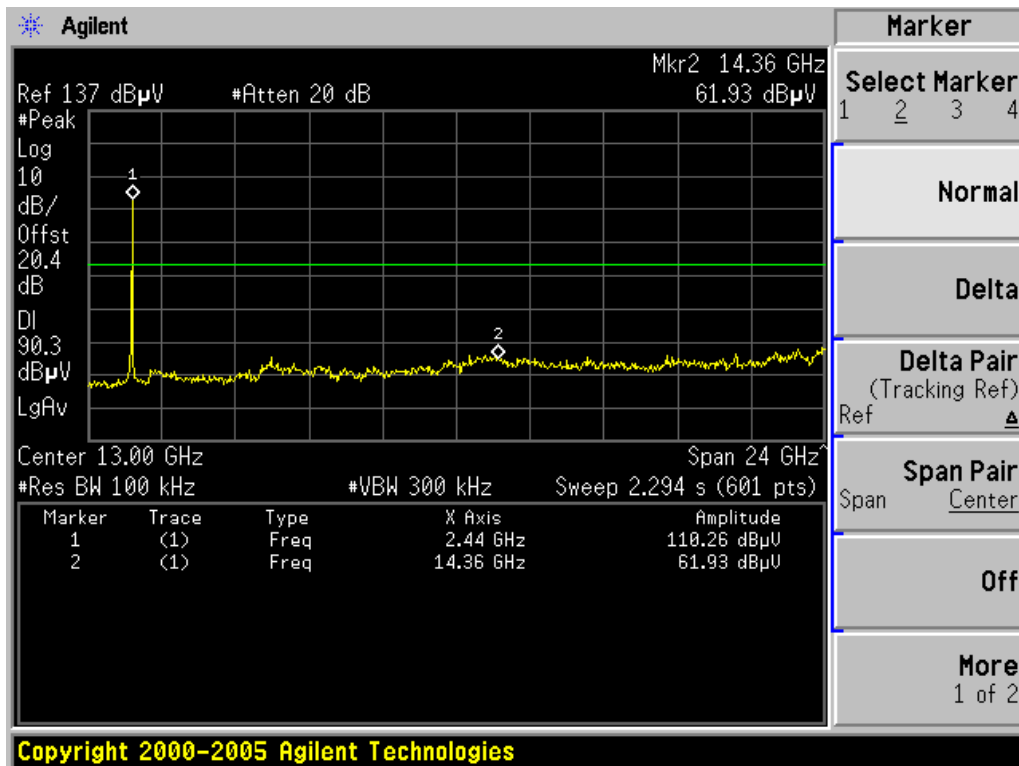


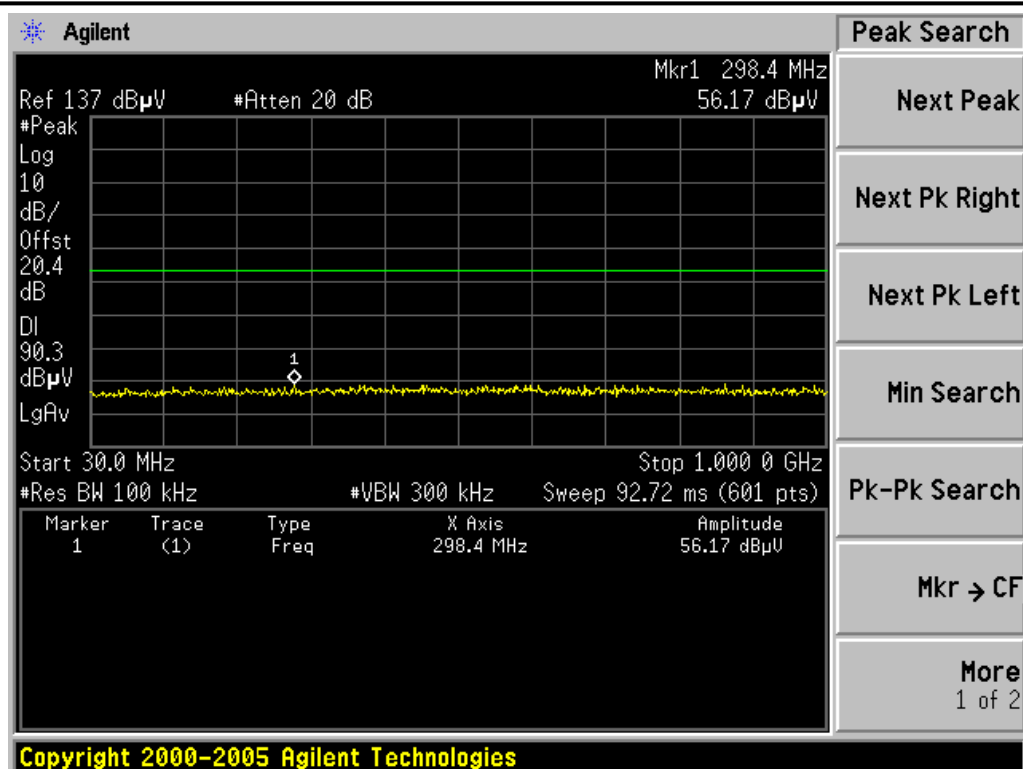
IEEE 802.11g CH1:



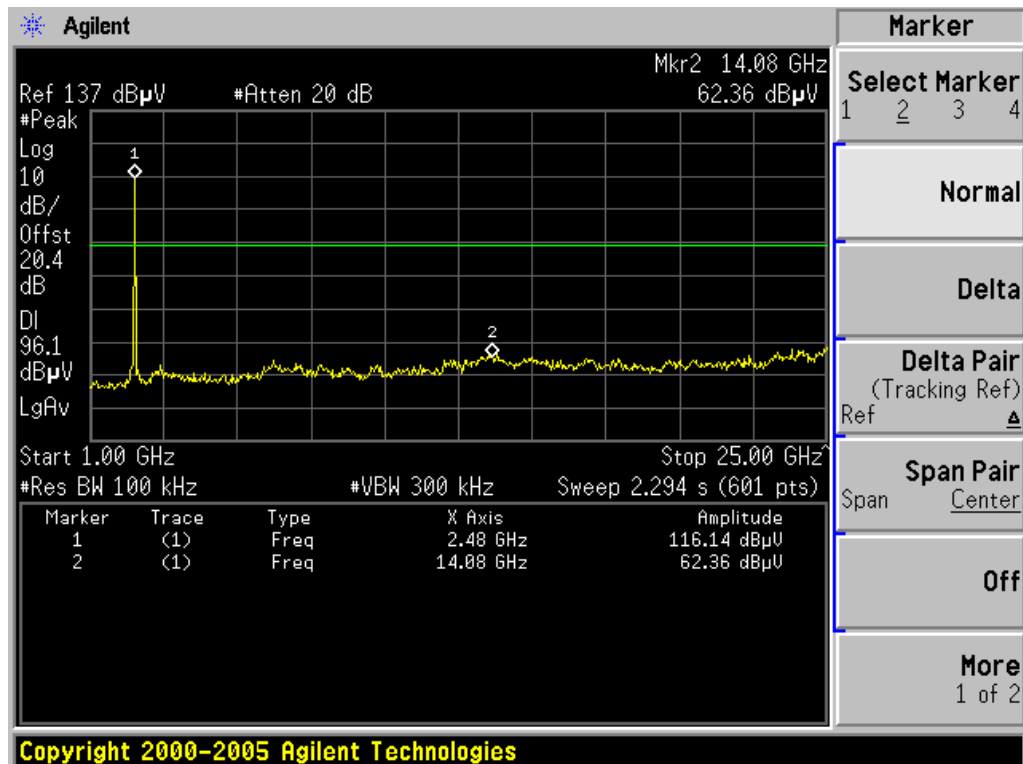


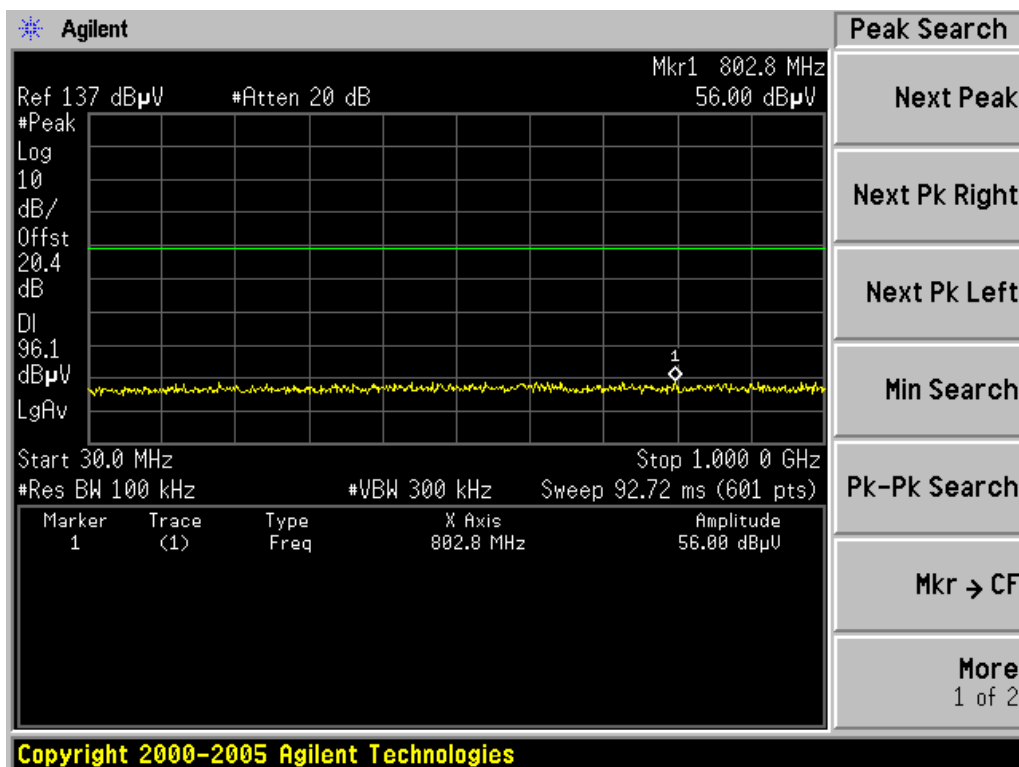
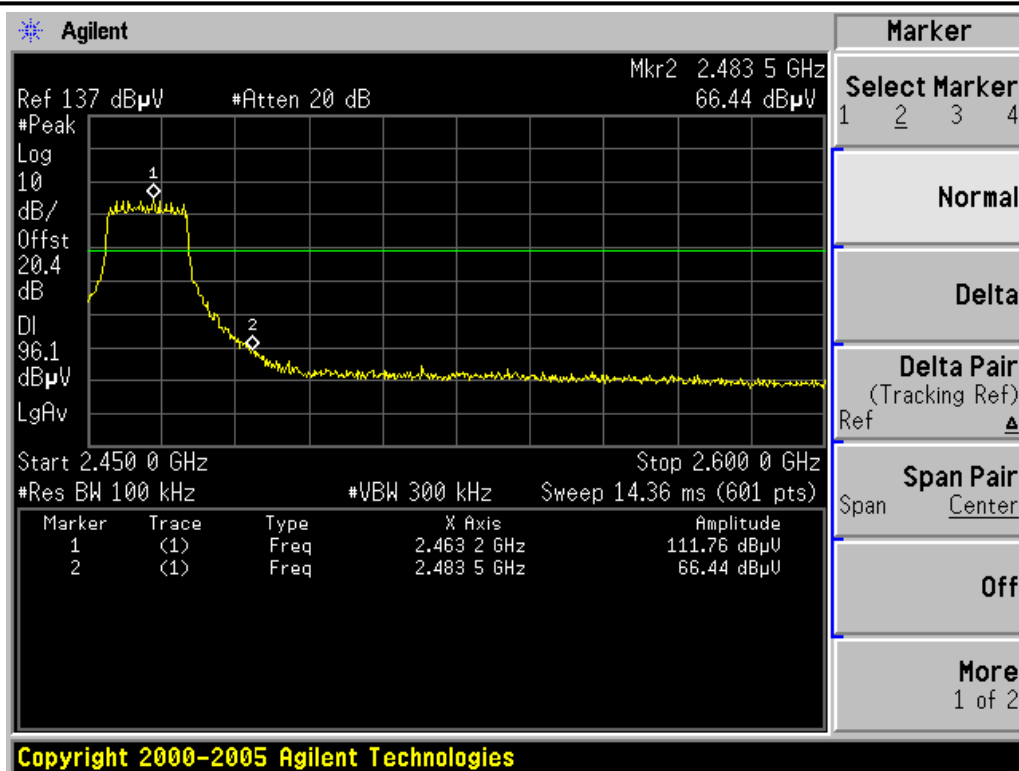
IEEE 802.11g CH6





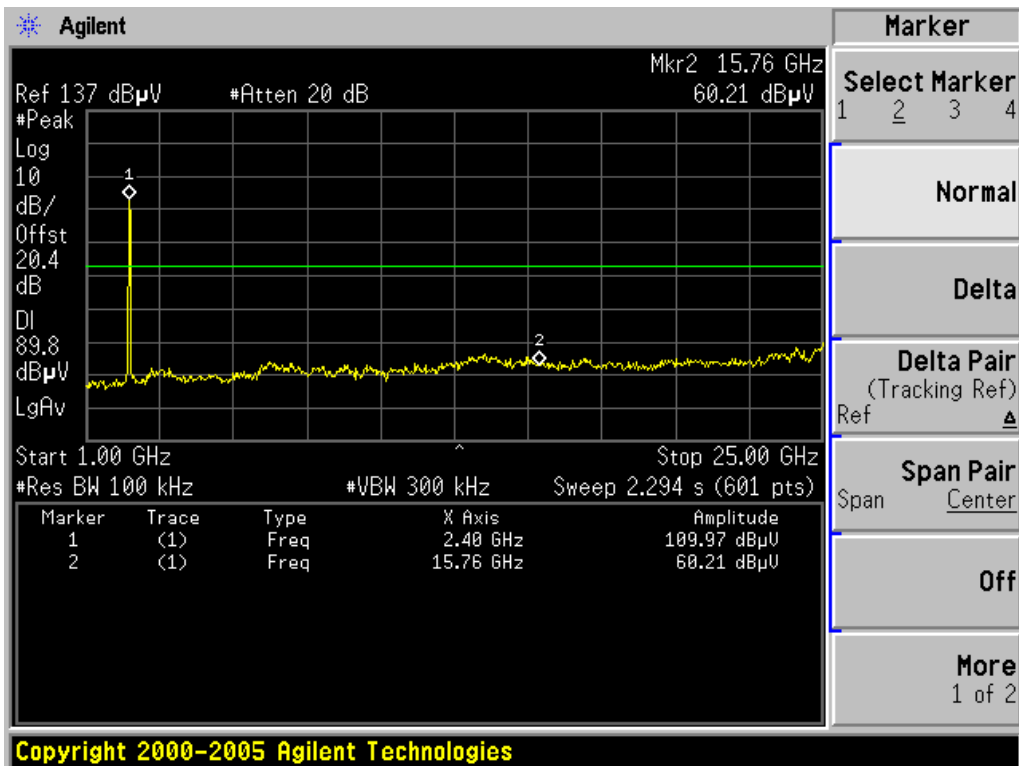
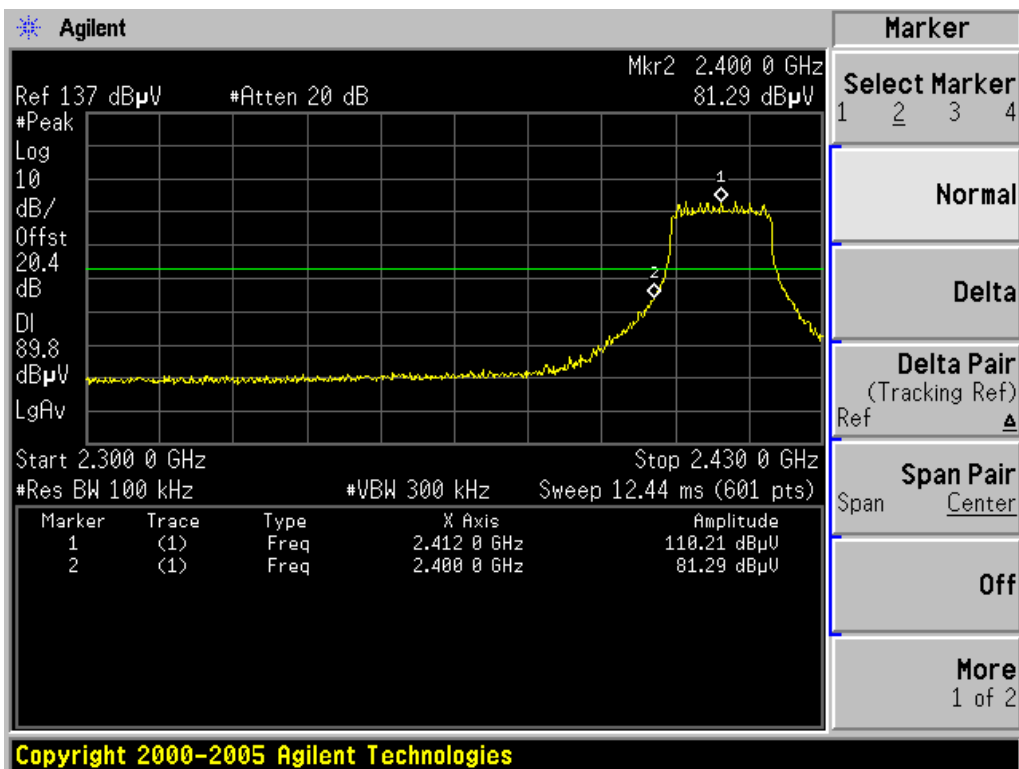
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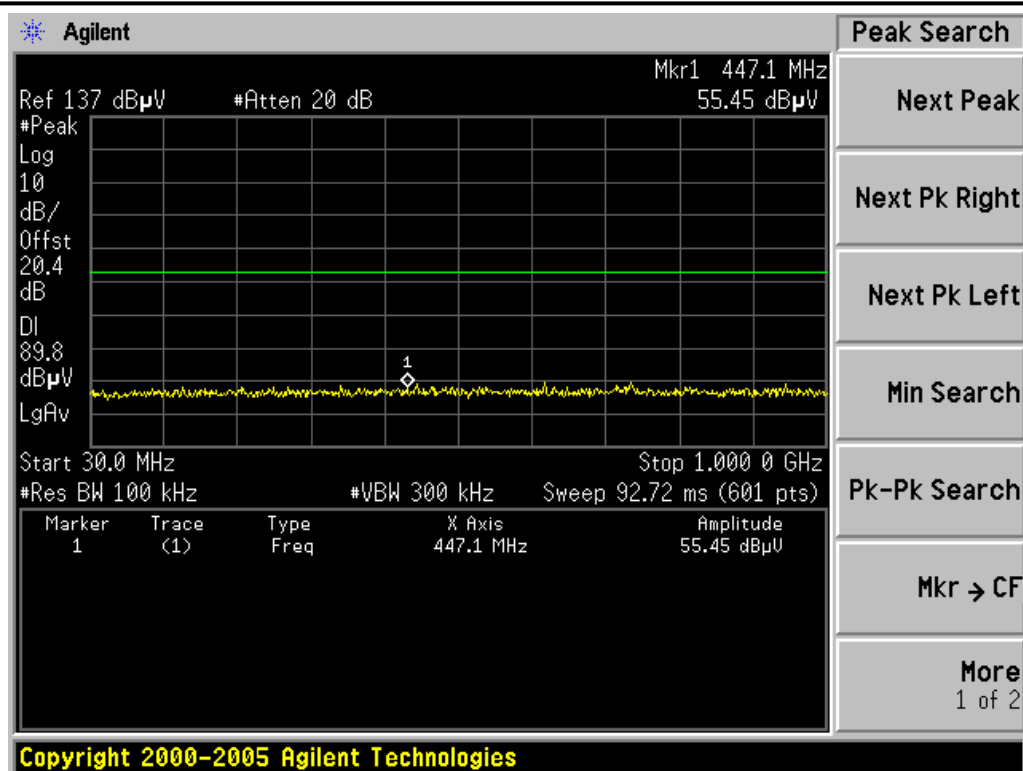




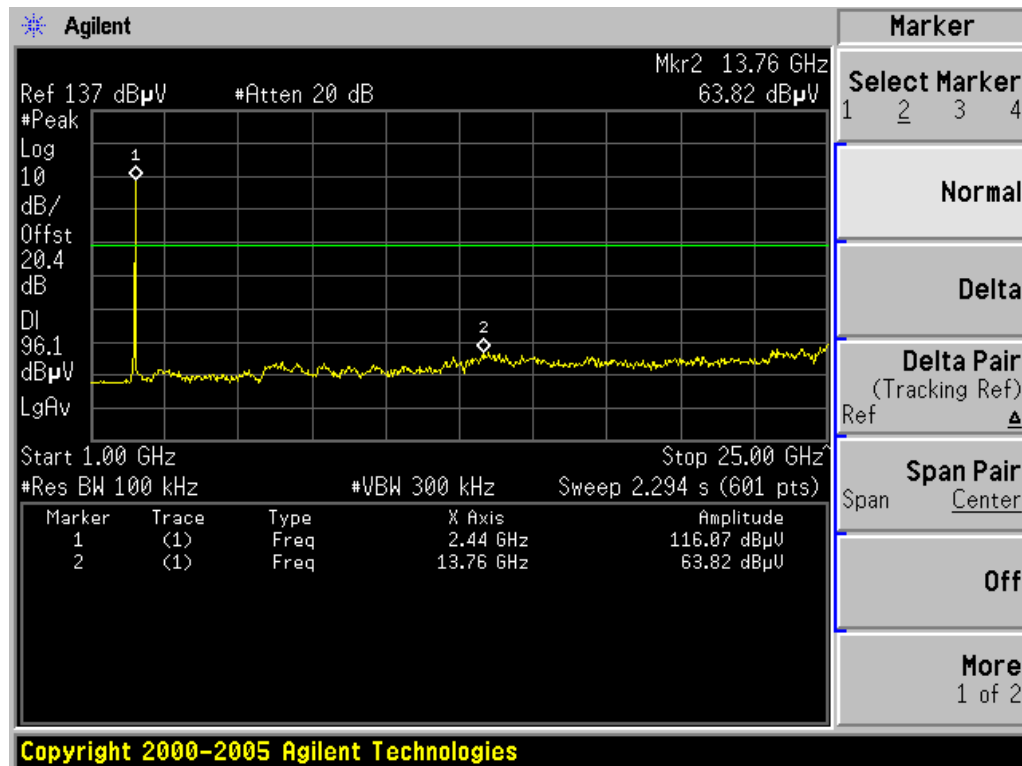


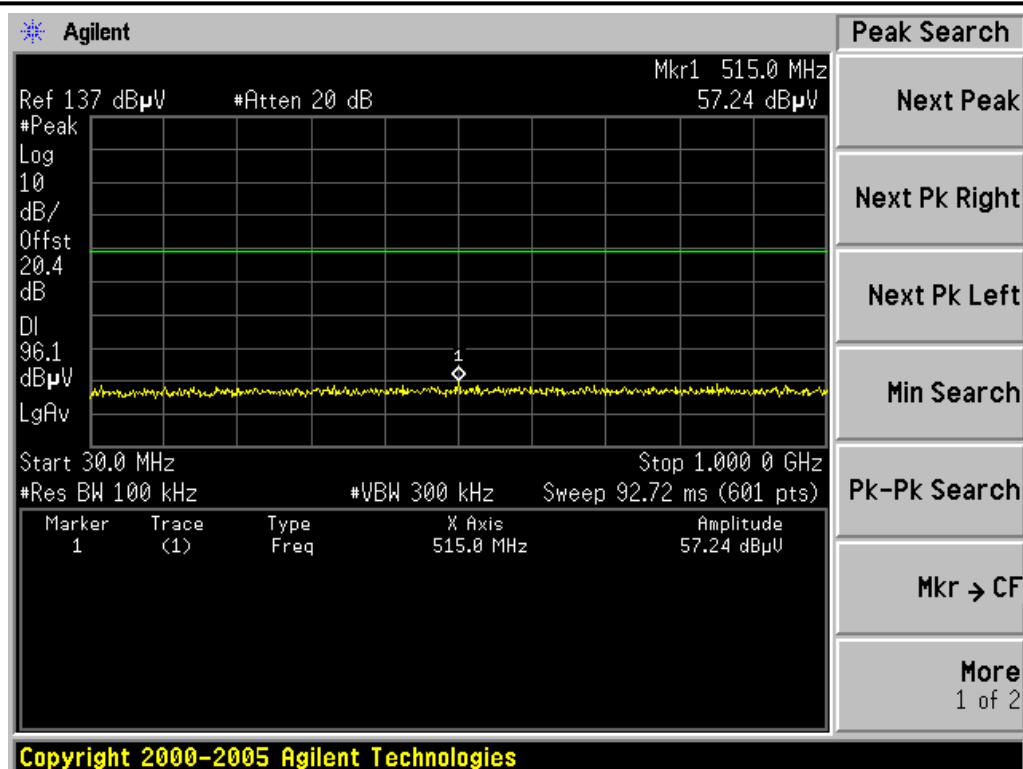
IEEE 802.11n HT20 CH1



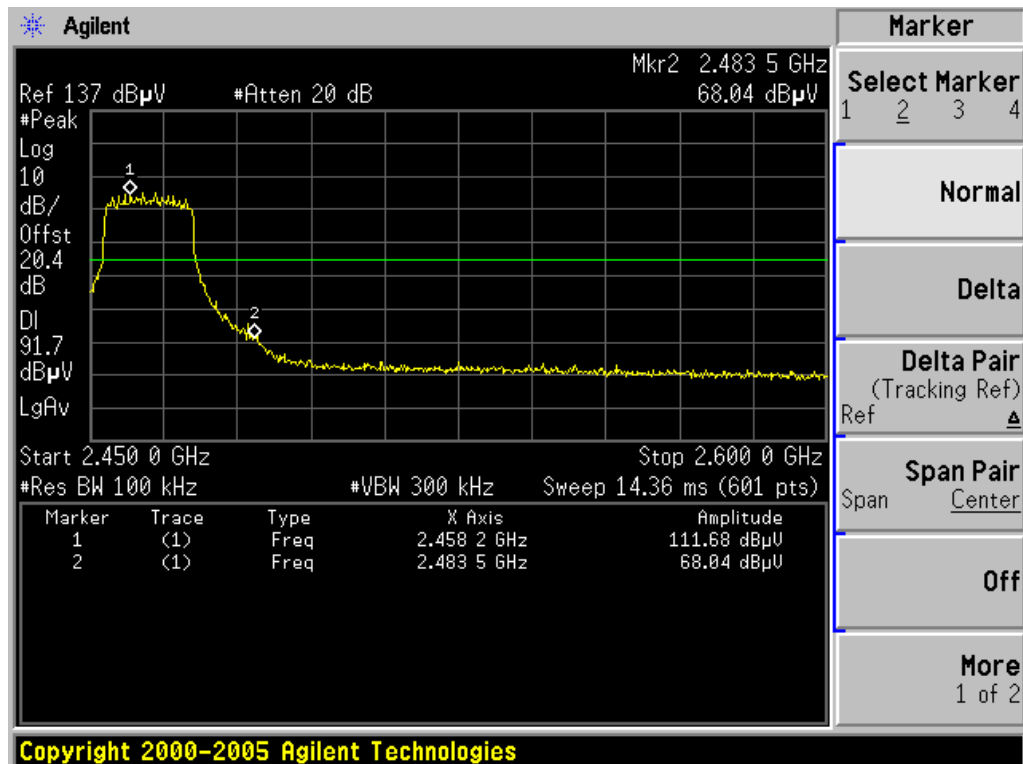


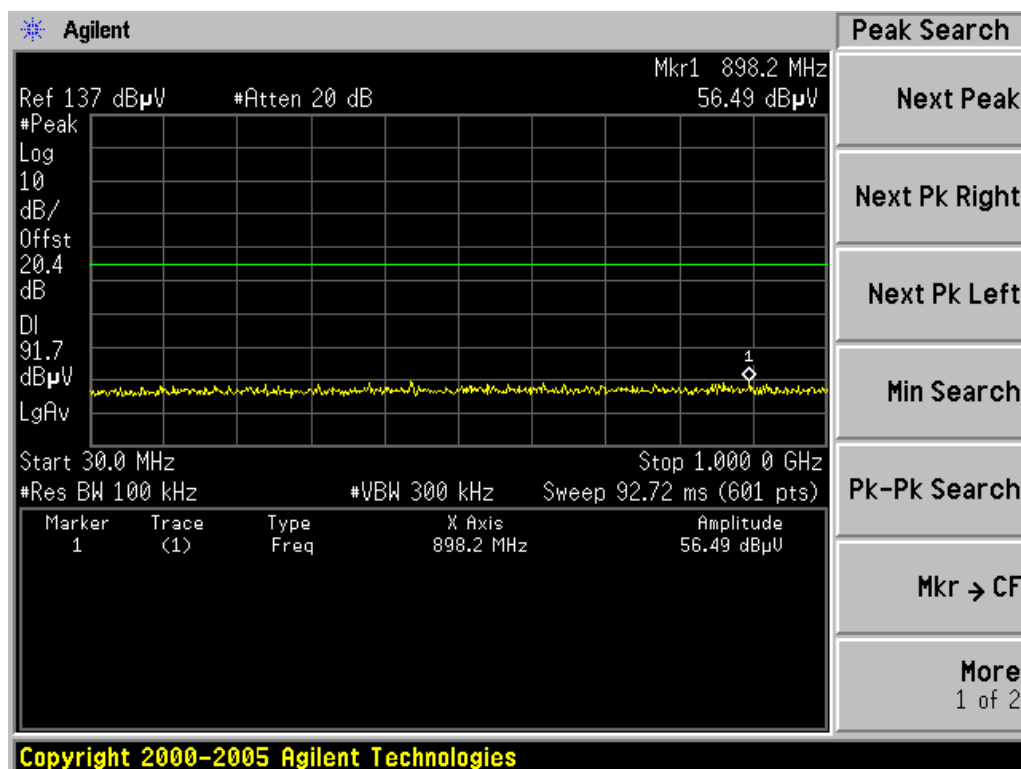
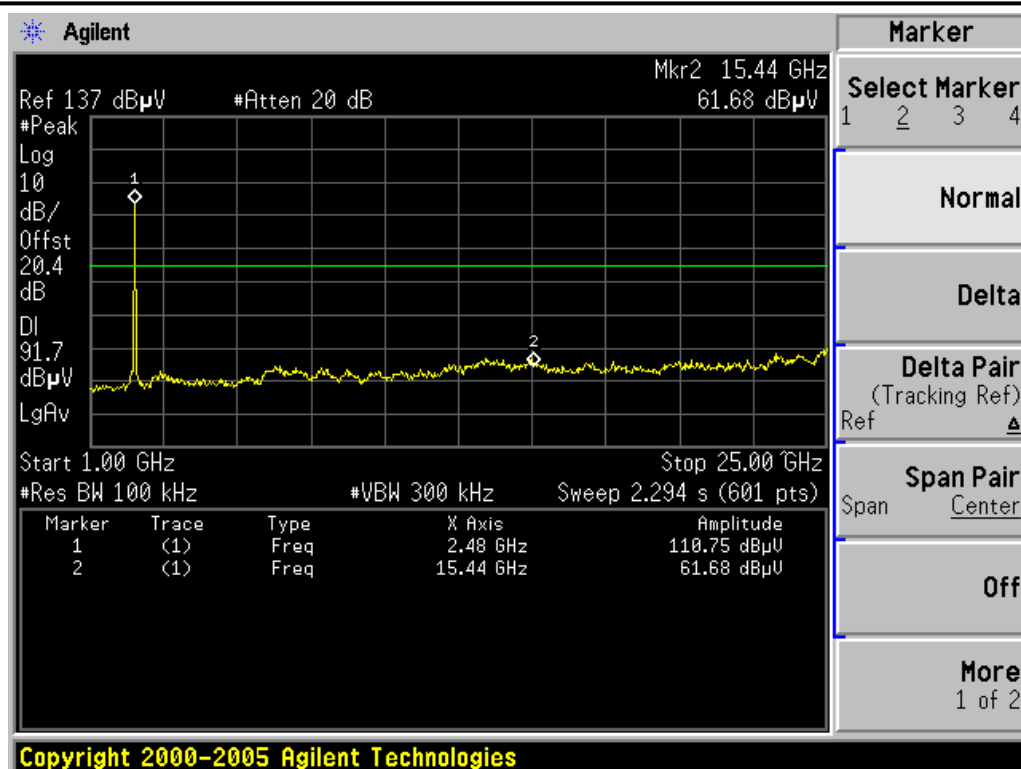
IEEE 802.11n HT20 CH6





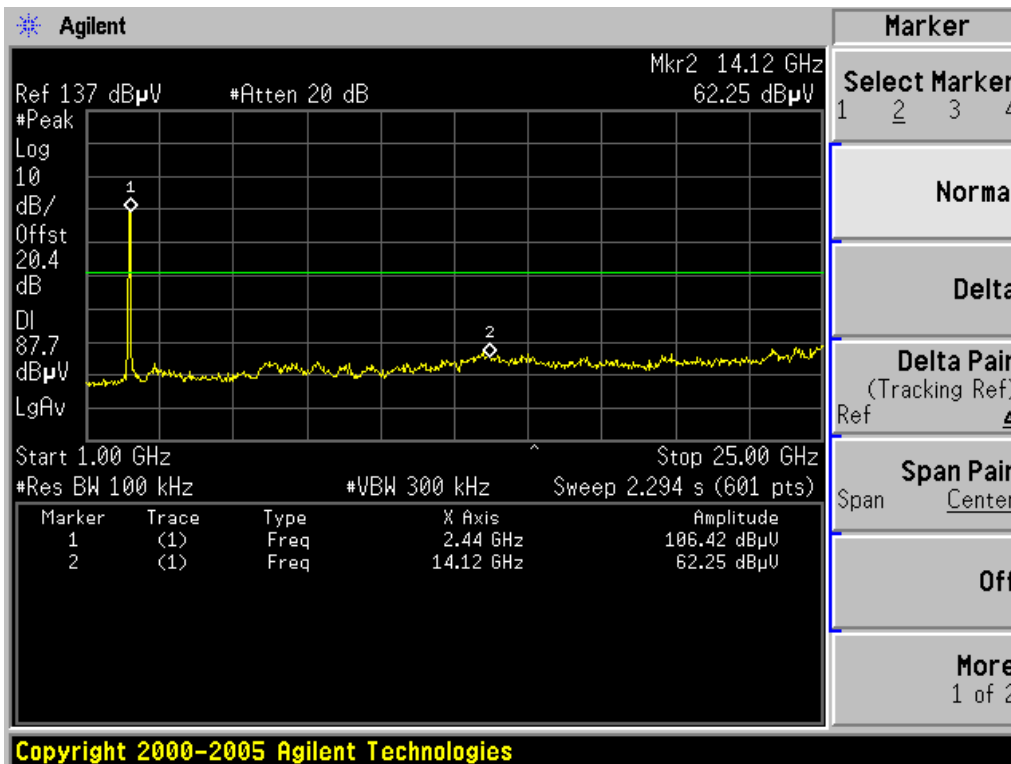
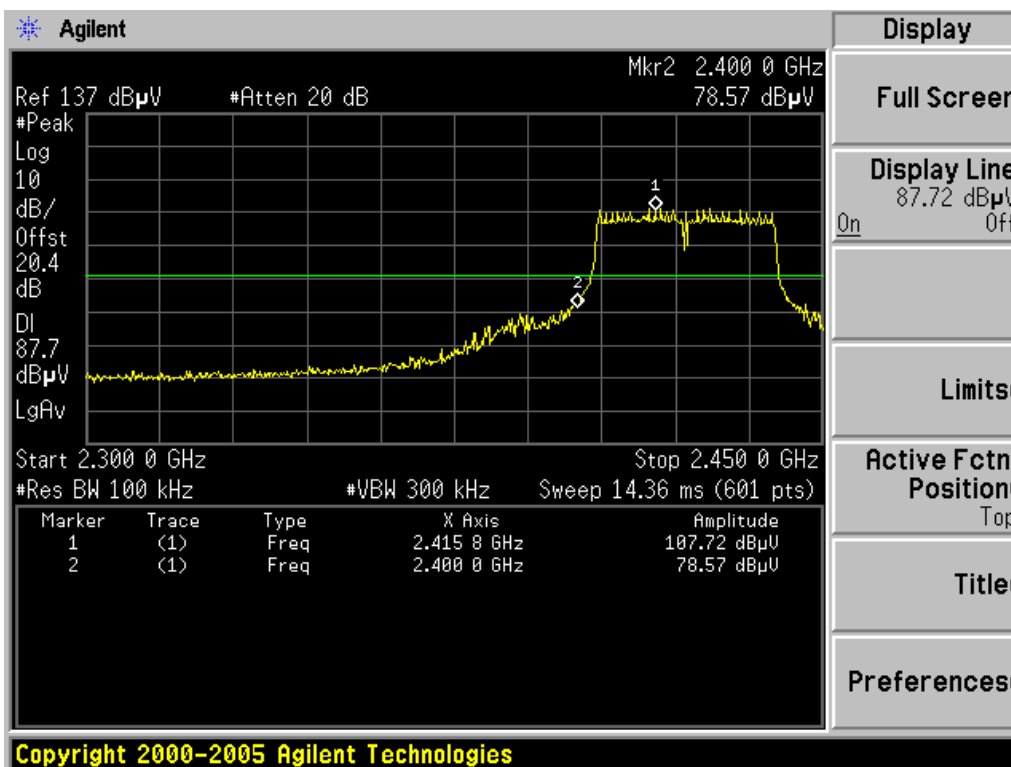
IEEE 802.11n HT20 CH11

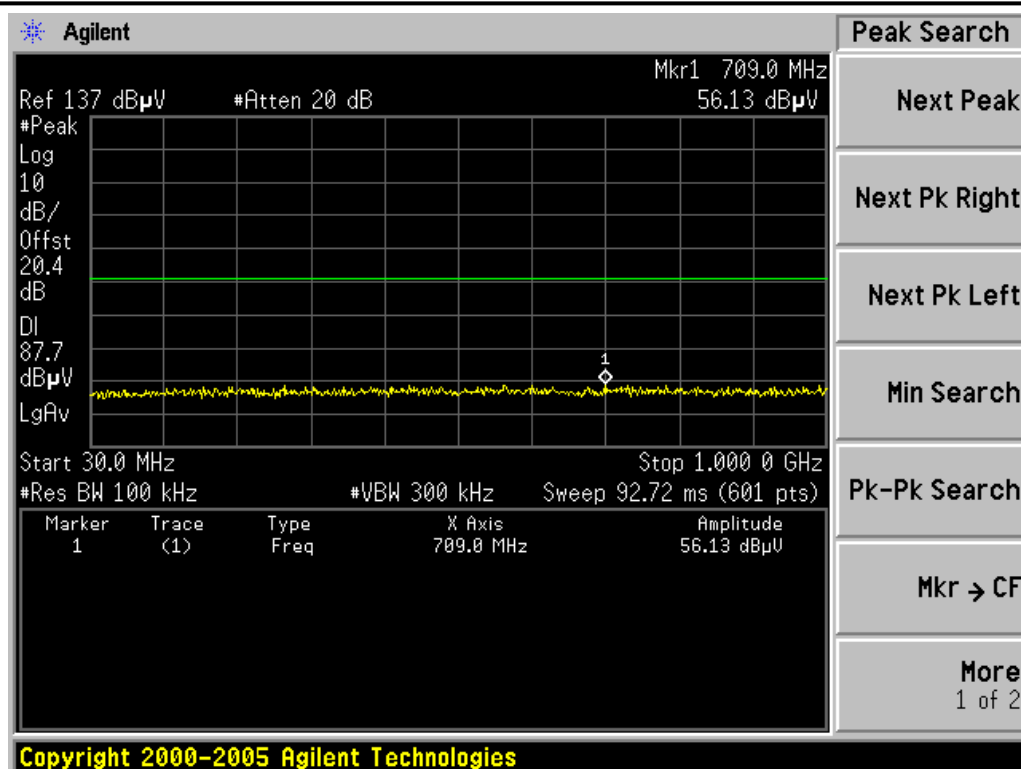




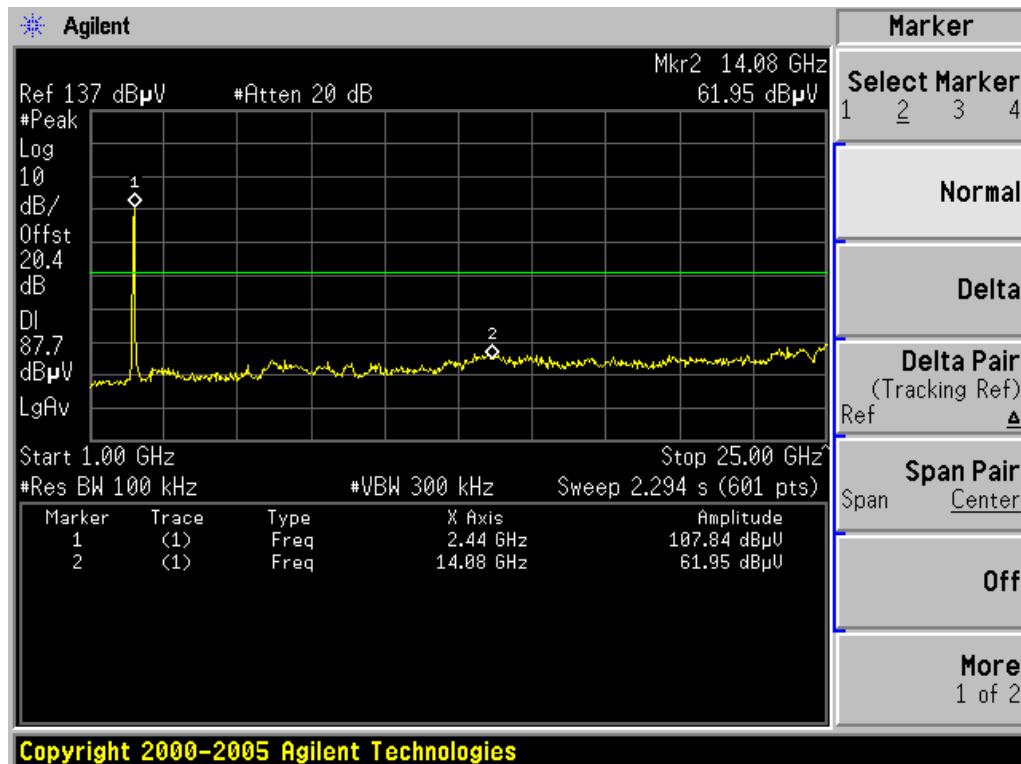


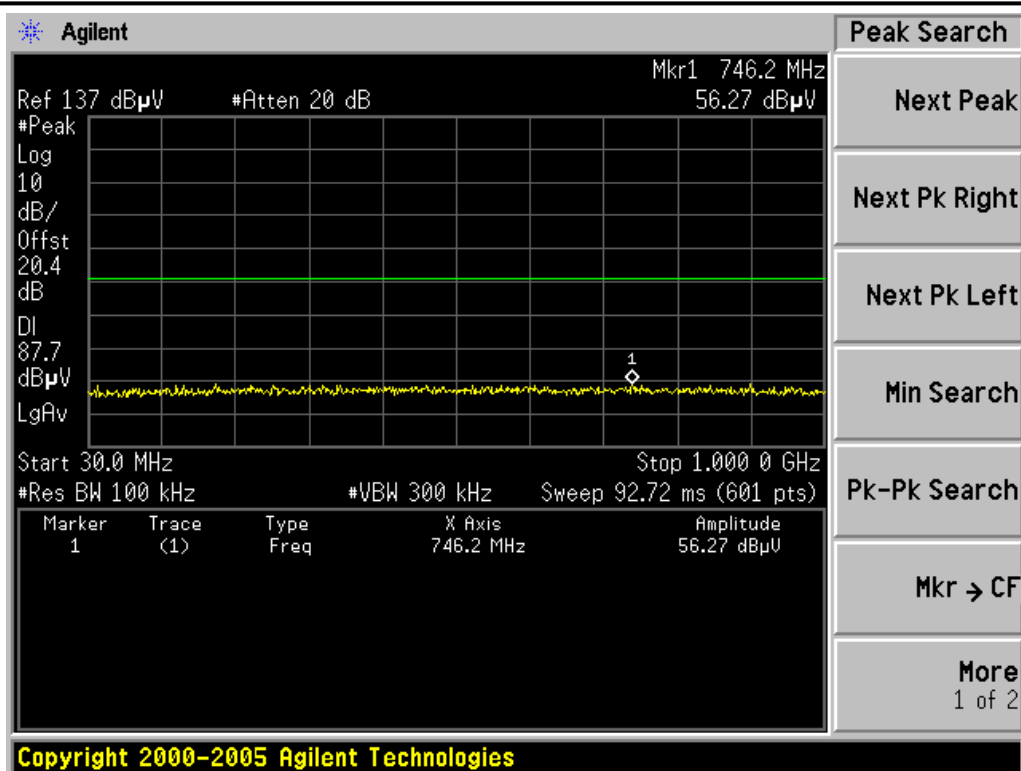
IEEE 802.11n HT40 CH1



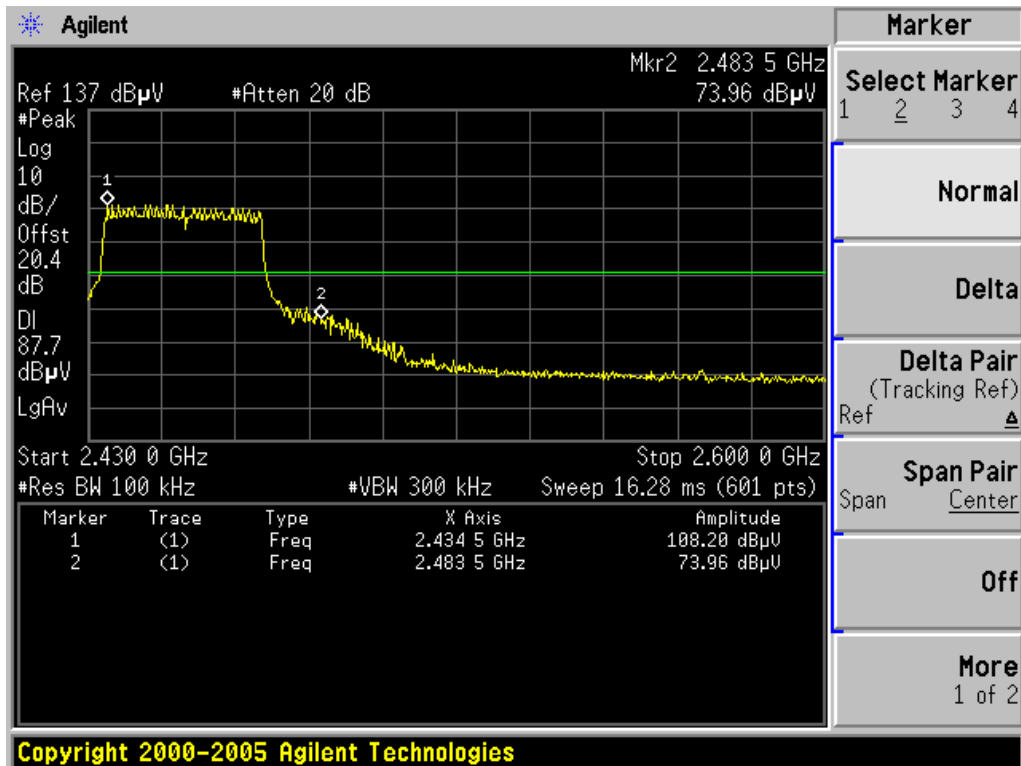


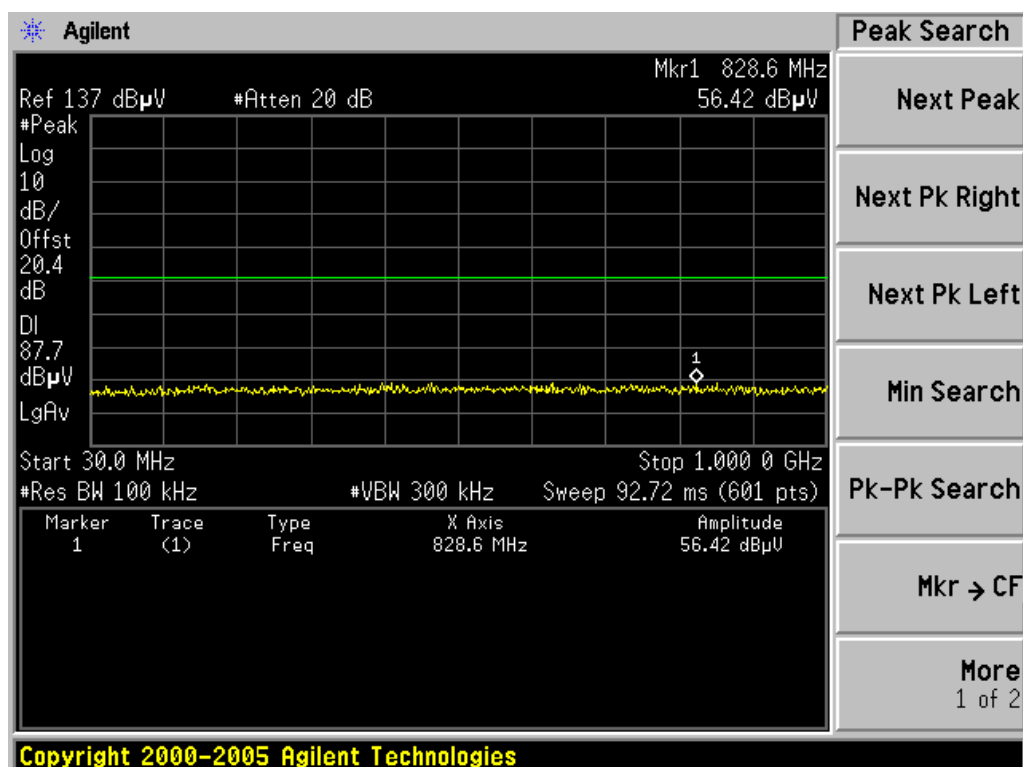
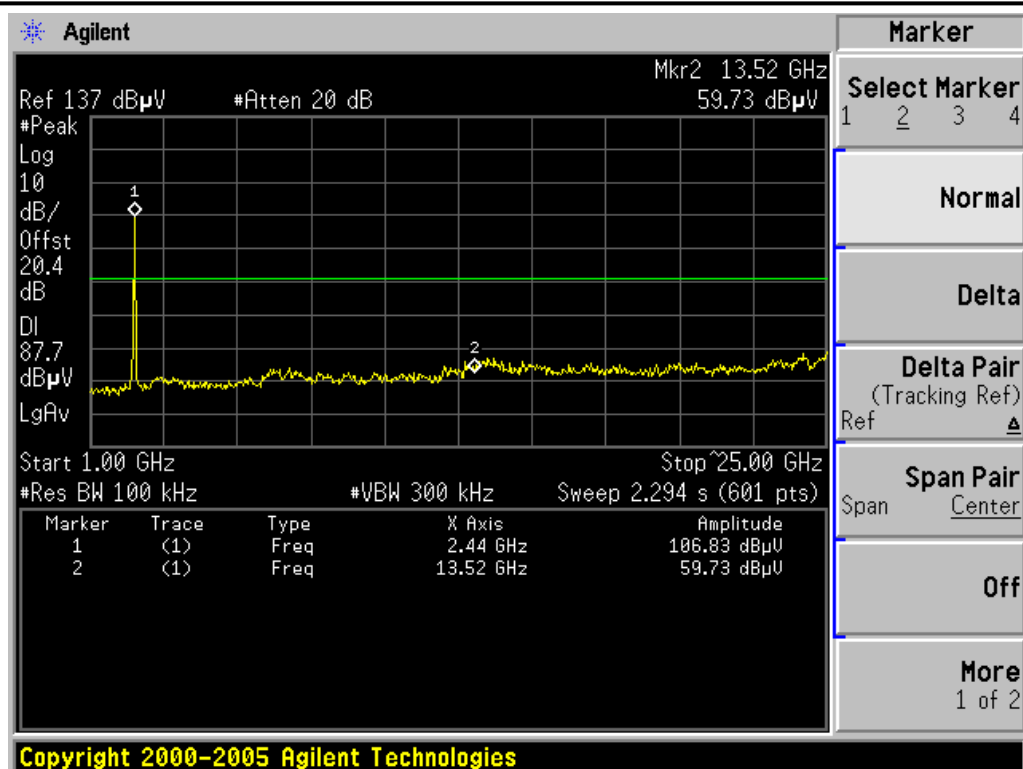
IEEE 802.11n HT40 CH4





IEEE 802.11n HT40 CH7





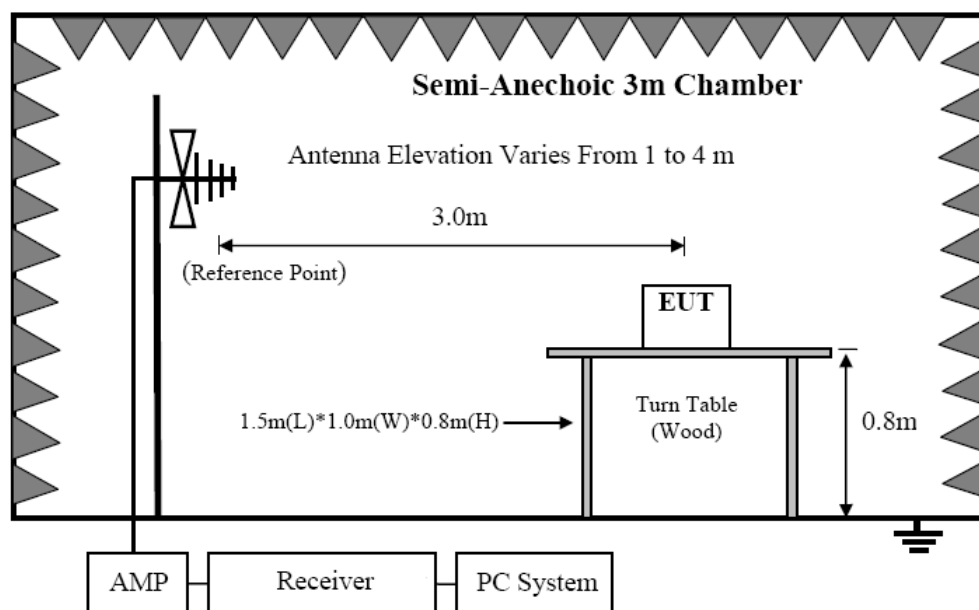
7 RADIATED EMISSION

7.1. TEST EQUIPMENT

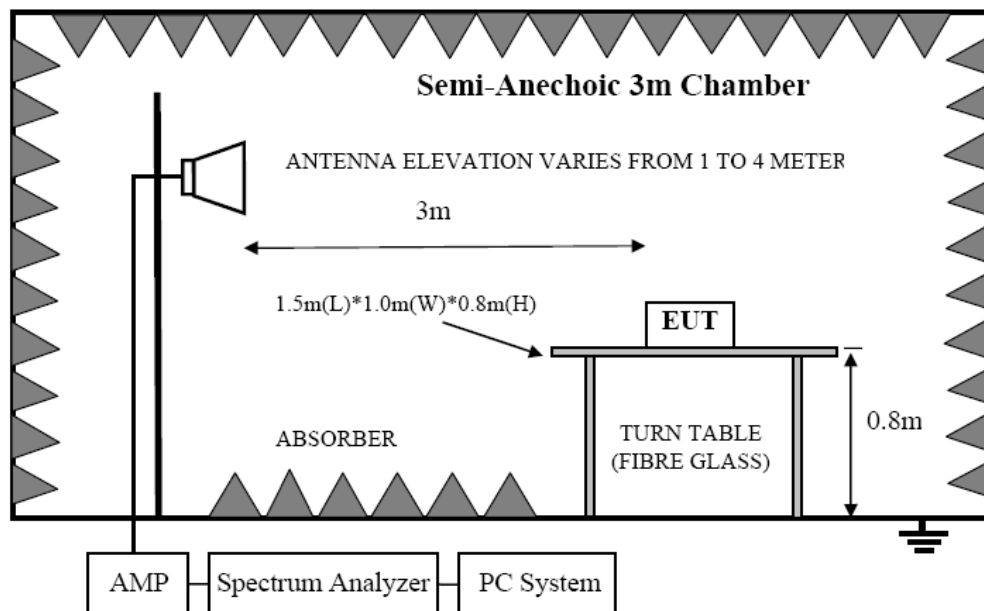
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	EMI Test Receiver	R&S	ESU8	100316	2011/11/23	1Y
2	Spectrum analyzer	R&S	FSU	1166.1660.26	2011/11/23	1Y
3	loop antenna	Chase	HLA6120	20129	2010/11/09	2 Y
4	Trilog Broadband Antenna	Schwarzbeck	VULB9163	9163-462	2010/11/09	2 Y
5	Double Ridged Horn Antenna	R&S	HF907	100276	2011/01/16	2 Y
6	Pre-Amplifier	R&S	SCU-01	10049	2011/11/23	1Y
7	Pre-amplifier	A.H.	PAM0-0118	360	2011/12/20	1Y
8	RF Cable	R&S	R01	10403	2011/11/23	1Y
9	RF Cable	R&S	R02	10512	2011/11/23	1Y
10	Test software	R&S	EMC32	/	/	/

7.2. BLOCK DIAGRAM OF TEST SETUP

In 3m Anechoic Chamber Test Setup Diagram for below 1GHz



In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz



Note: For harmonic emissions test a appropriate high pass filter was inserted in the input port of AMP.

7.3. LIMITS

FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)



FCC 15.209 Limit

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V})/\text{m}$
0.009-0.490	300	$2400/F(\text{KHz})$	$67.6-20\log(F)$
0.490-1.705	30	$24000/F(\text{KHz})$	$87.6-20\log(F)$
1.705-30.0	30	30	29.54
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

Limit for this EUT:

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

7.4. TEST PROCEDURE

- (1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber.
- (2) Setup EUT and assistant system according clause 2.5 and 8.2
- (3) Test antenna was located 3m from the EUT on an adjustable mast. Below pre-scan procedure was first performed in order to find prominent radiated emissions.
 - (a) Change work frequency or channel of device if practicable.
 - (b) Change modulation type of device if practicable.
 - (c) Change power supply range from 85% to 115% of the rated supply voltage
 - (d) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions
- (4) Spectrum frequency from 9KHz to 25GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 9KHz to 30MHz and 18GHz to 25GHz, so below final test was performed with frequency range from 30MHz to 18GHz.
- (5) For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in



both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10 2009 on Radiated Emission test.

- (6) For emissions from 30MHz to 1GHz, Quasi-Peak values were measured with EMI Receiver and the bandwidth of Receiver is 120 KHz.
- (7) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz for Peak measure; RBW is set at 1MHz, VBW is set at 10Hz for Average measure.
- (8) For emissions below 1GHz, according explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1GHz, the final test was only performed with EUT working in IEEE802.11b, CH6 Tx mode.

7.5. TEST RESULT

PASS. (See below detailed test result)

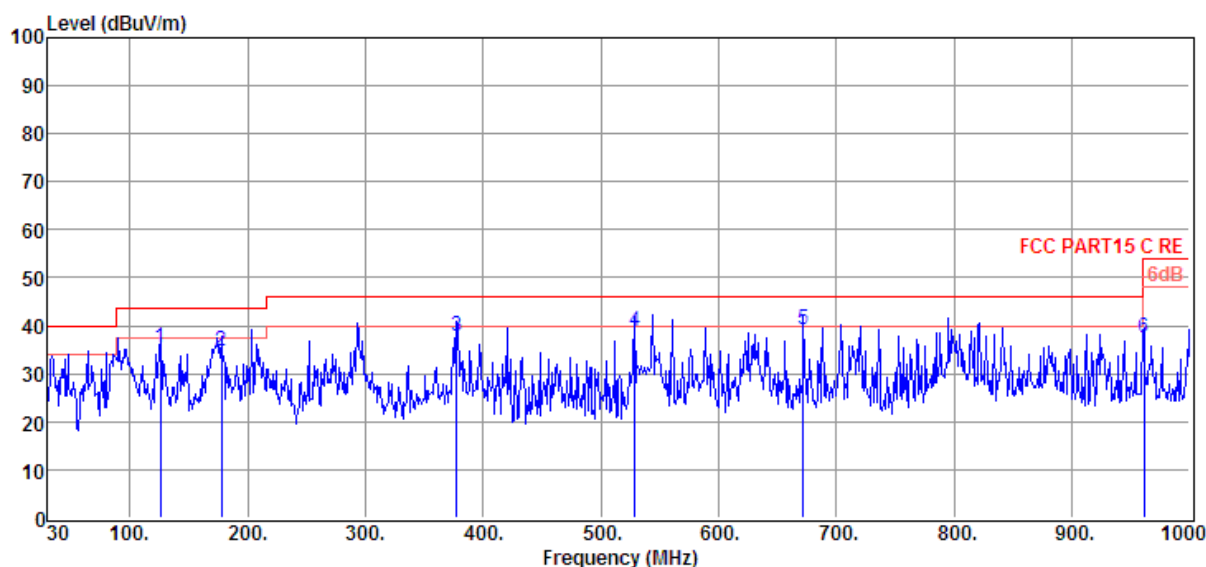
All the emissions except fundamental emission from 9KHz to 25GHz were comply with 15.209 limit.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : Tx Mode
Condition : Temp:24.5°C,Humi:55% **Antenna/Distance** : VULB 9163/3m/VERTICAL

Data : 1



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	126.03	68.27	9.70	43.75	1.28	35.50	43.50	-8.00	QP	VERTICAL
2	177.44	67.33	9.44	43.73	1.67	34.71	43.50	-8.79	QP	VERTICAL
3	377.26	64.26	14.59	43.60	2.54	37.79	46.00	-8.21	QP	VERTICAL
4	528.58	61.74	17.16	43.11	3.02	38.81	46.00	-7.19	QP	VERTICAL
5	672.14	60.14	18.71	43.20	3.54	39.19	46.00	-6.81	QP	VERTICAL
6	961.20	55.63	21.51	44.07	4.37	37.44	54.00	-16.56	QP	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

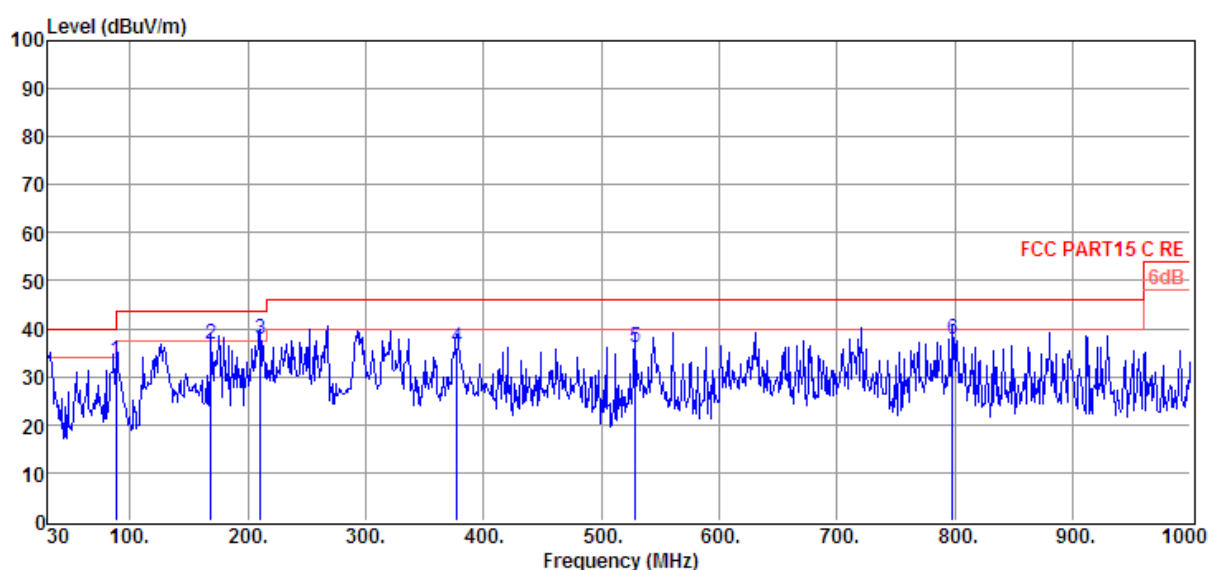
2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : Tx Mode
Condition : Temp:24.5°C,Humi:55% **Antenna/Distance** : VULB 9163/3m/HORIZONTAL

Data : 2



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	88.20	63.94	11.90	43.77	1.12	33.19	43.50	-10.31	QP	HORIZONTAL
2	168.71	69.87	8.97	43.74	1.64	36.74	43.50	-6.76	QP	HORIZONTAL
3	210.42	68.80	10.95	43.70	1.77	37.82	43.50	-5.68	QP	HORIZONTAL
4	377.26	62.45	14.59	43.60	2.54	35.98	46.00	-10.02	QP	HORIZONTAL
5	528.58	59.09	17.16	43.11	3.02	36.16	46.00	-9.84	QP	HORIZONTAL
6	798.24	57.50	20.06	43.74	3.88	37.70	46.00	-8.30	QP	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

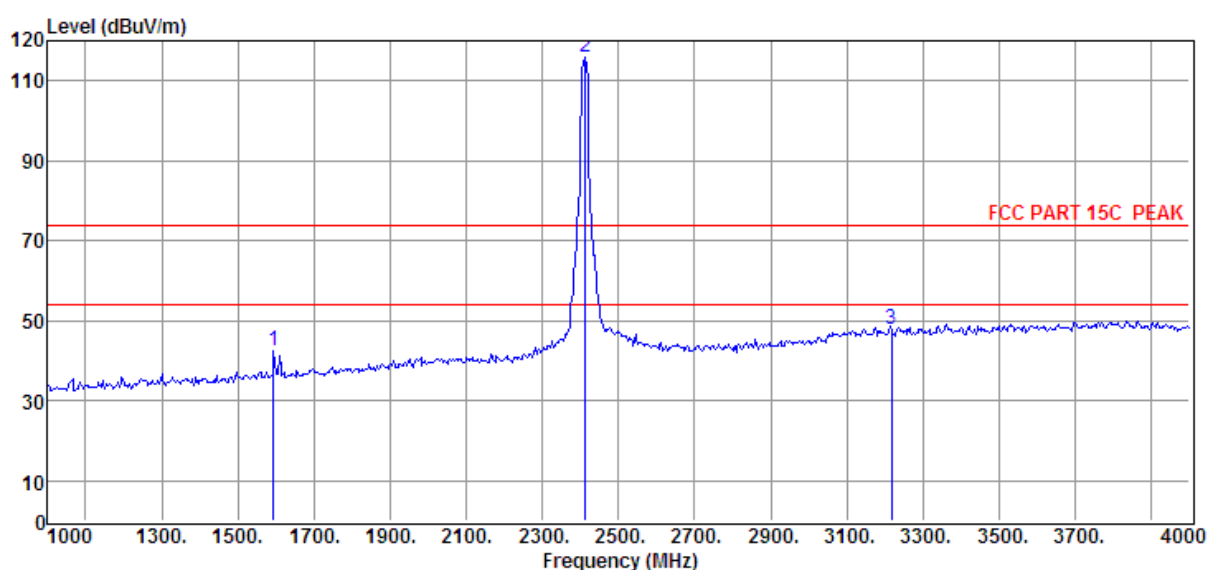
2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 1



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1594.00	54.00	26.57	43.34	5.18	42.41	74.00	-31.59	Peak	VERTICAL
2	2412.00	113.69	29.45	35.95	8.72	115.91	74.00	41.91	Peak	VERTICAL
3	3217.00	52.22	31.76	43.62	7.52	47.88	74.00	-26.12	Peak	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

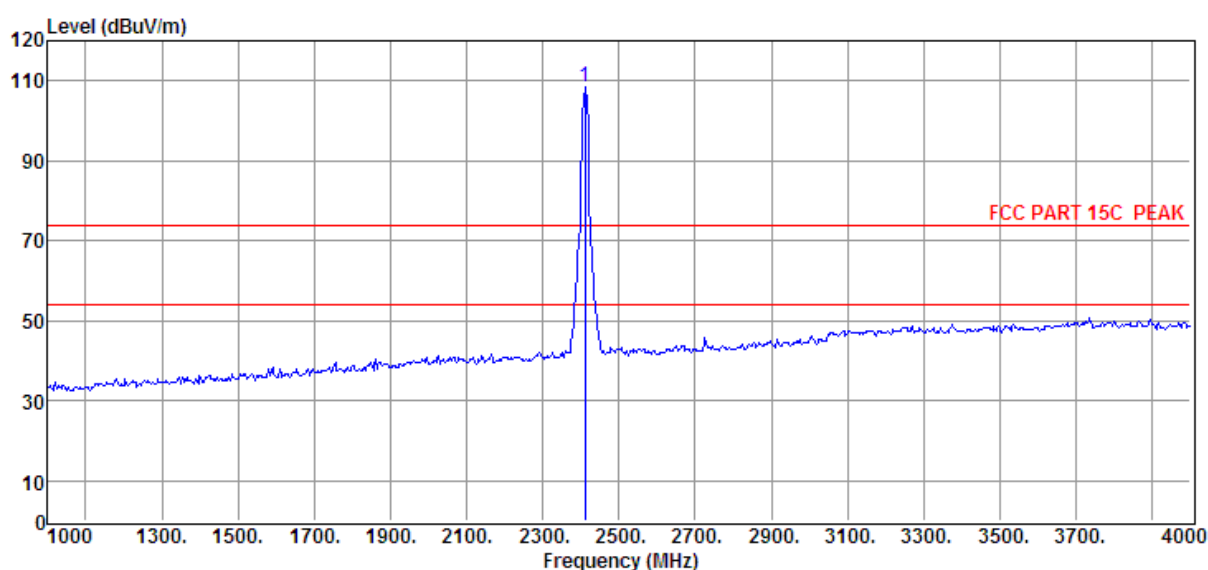
Note3: 2412MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 2



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2412.00	116.65	28.98	43.49	6.49	108.63	74.00	34.63	Peak	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

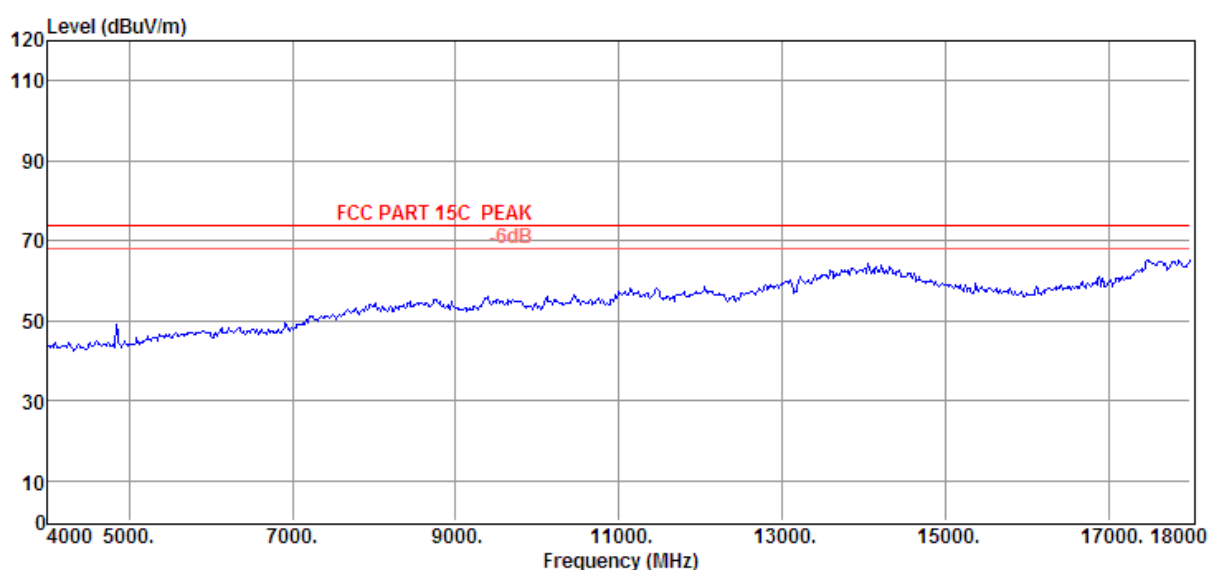
Note3: 2412MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 3



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

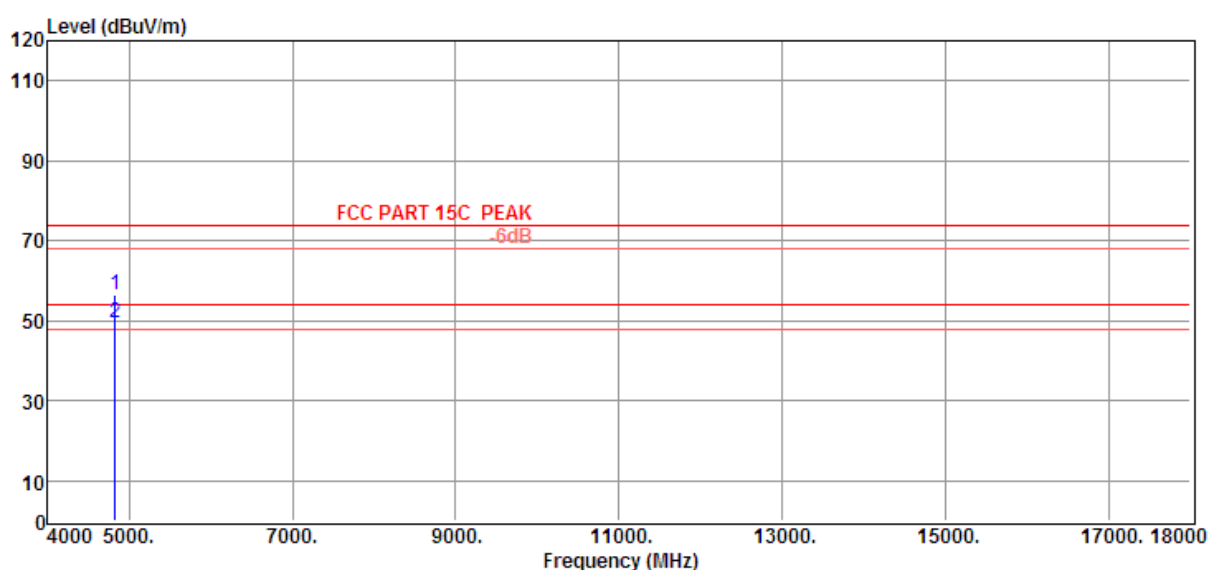
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 4



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	4824.00	45.12	34.32	35.25	12.38	56.57	74.00	-17.43	Peak	VERTICAL
2	4824.00	38.01	34.32	35.25	12.38	49.46	54.00	-4.54	Average	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

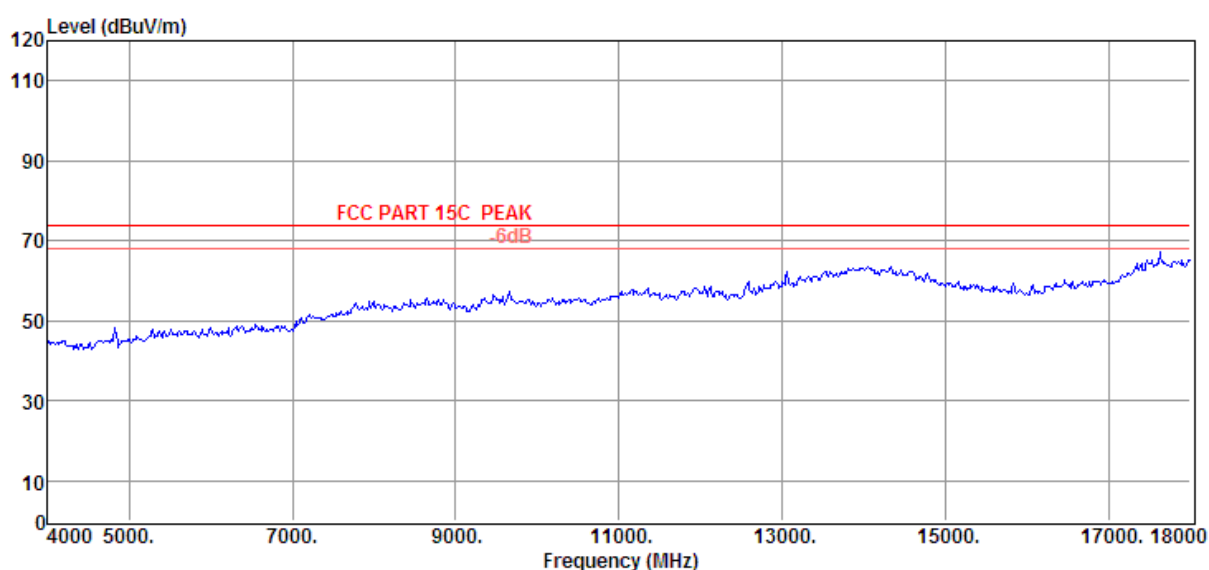
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 5



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

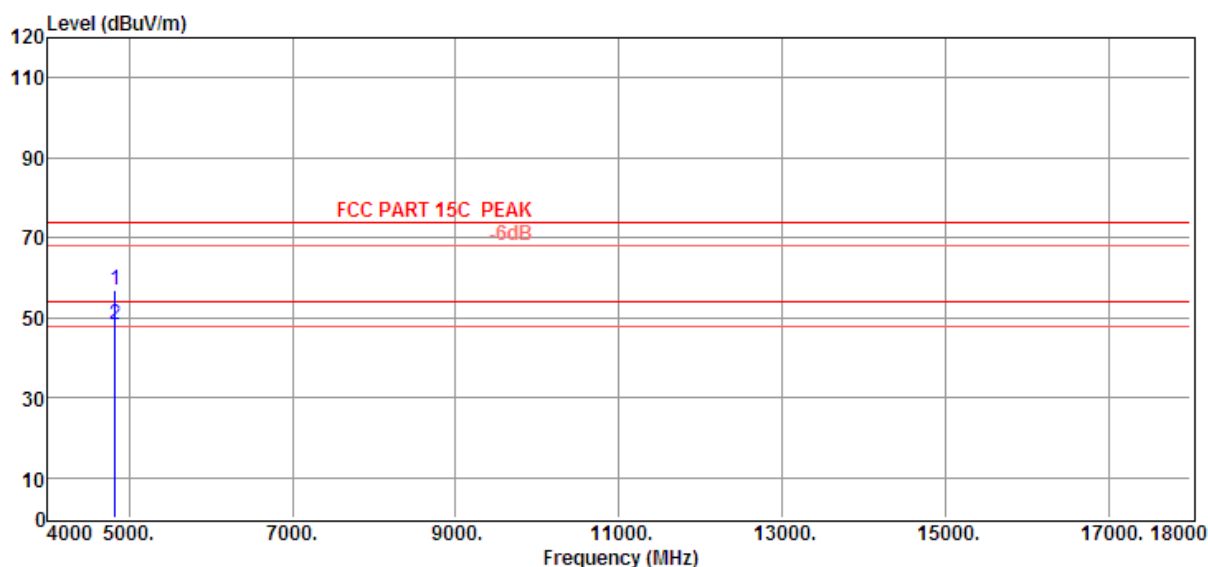
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 6



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	4824.00	45.53	34.32	35.25	12.38	56.98	74.00	-17.02	Peak	HORIZONTAL
2	4824.00	36.88	34.32	35.25	12.38	48.33	54.00	-5.67	Average	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

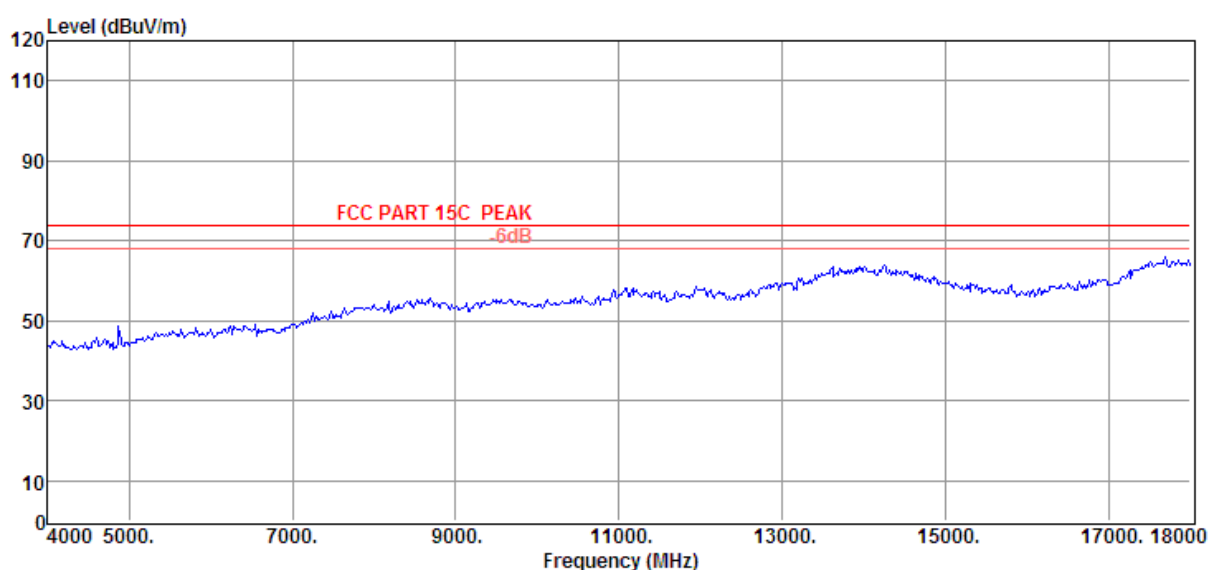
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 7



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

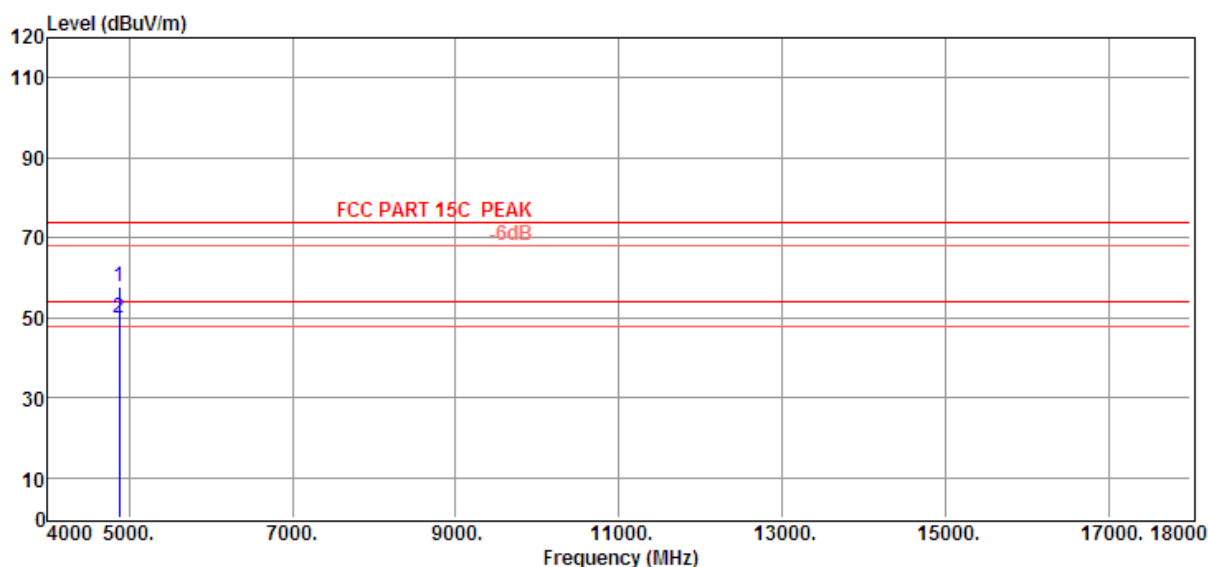
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 8



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	4874.00	46.26	34.41	35.36	12.44	57.75	74.00	-16.25	Peak	VERTICAL
2	4874.00	38.28	34.41	35.36	12.44	49.77	54.00	-4.23	Average	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

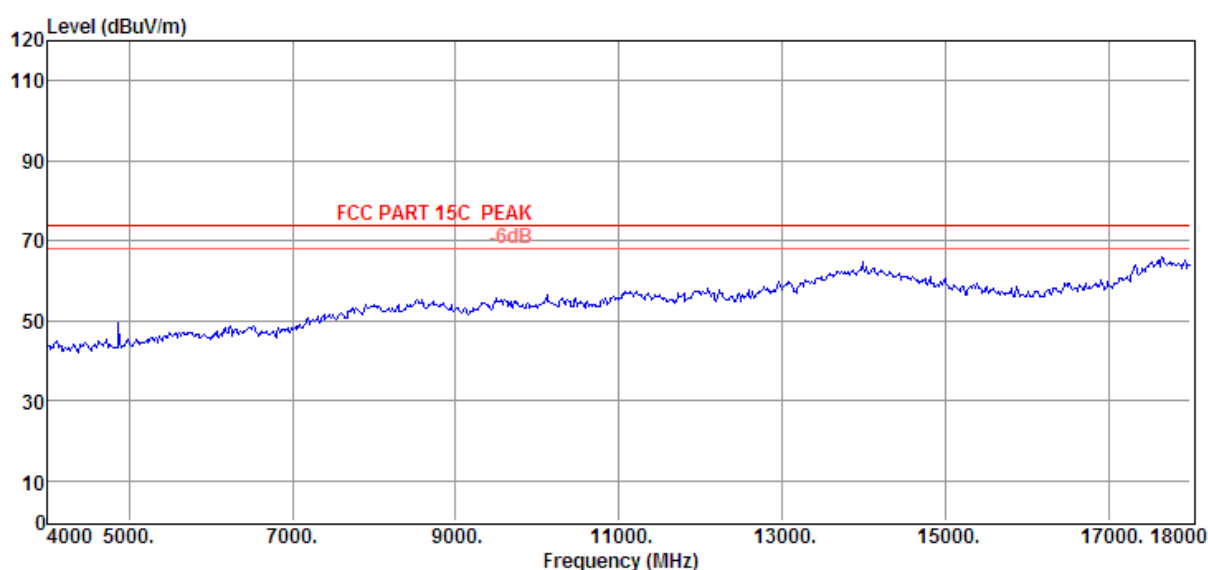
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 9



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

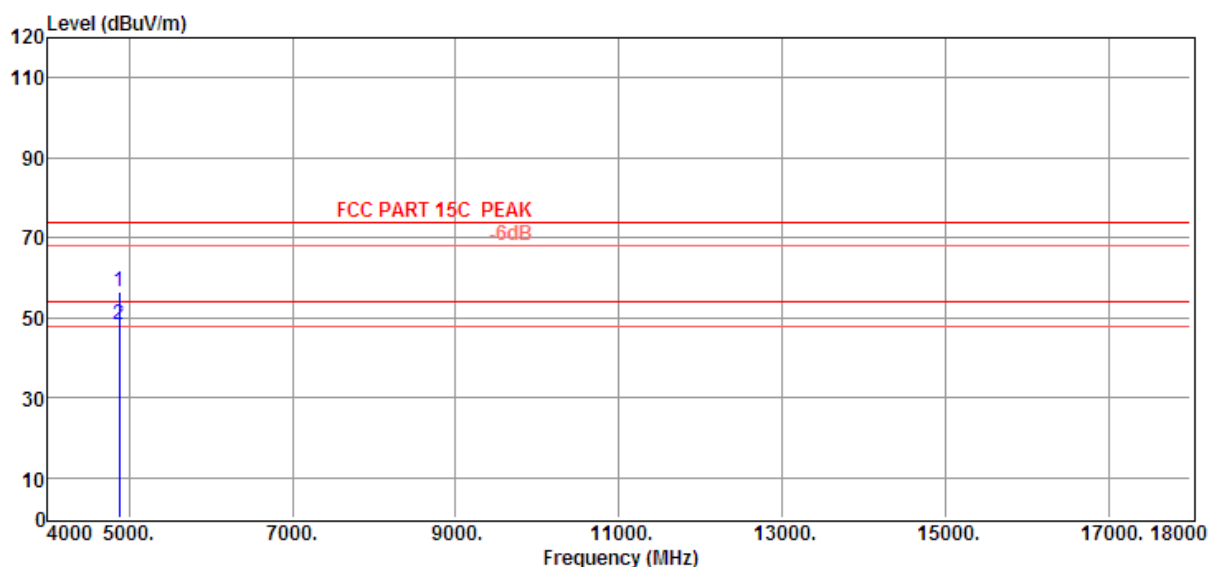
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 10



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	4874.00	44.98	34.41	35.36	12.44	56.47	74.00	-17.53	Peak	HORIZONTAL
2	4874.00	36.93	34.41	35.36	12.44	48.42	54.00	-5.58	Average	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

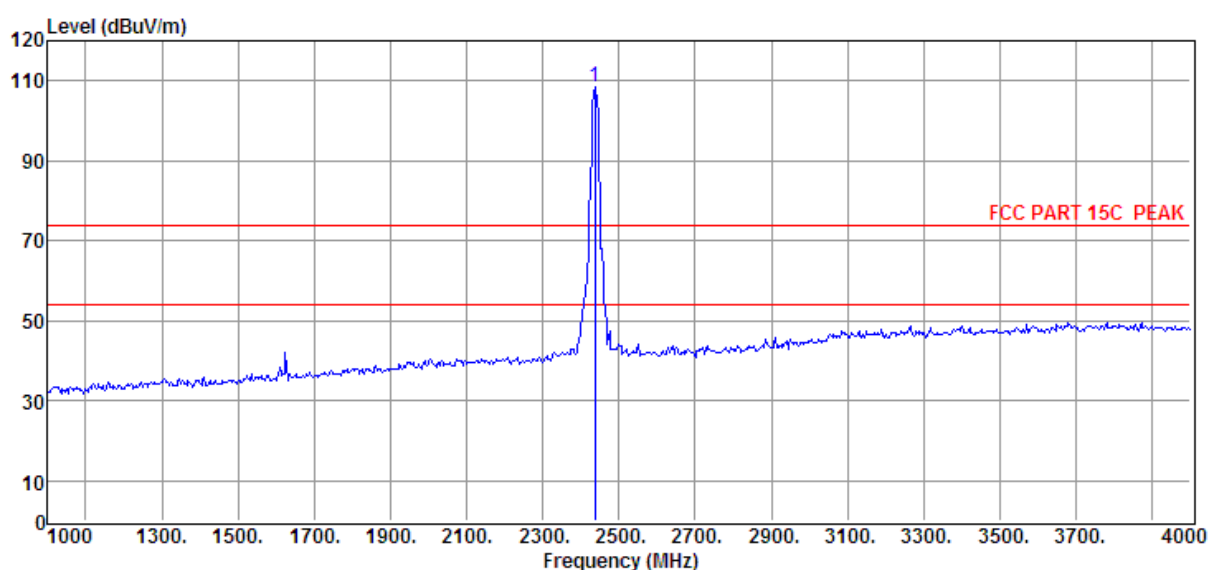
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 11



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2437.00	106.48	29.47	36.06	8.77	108.66	74.00	34.66	Peak	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

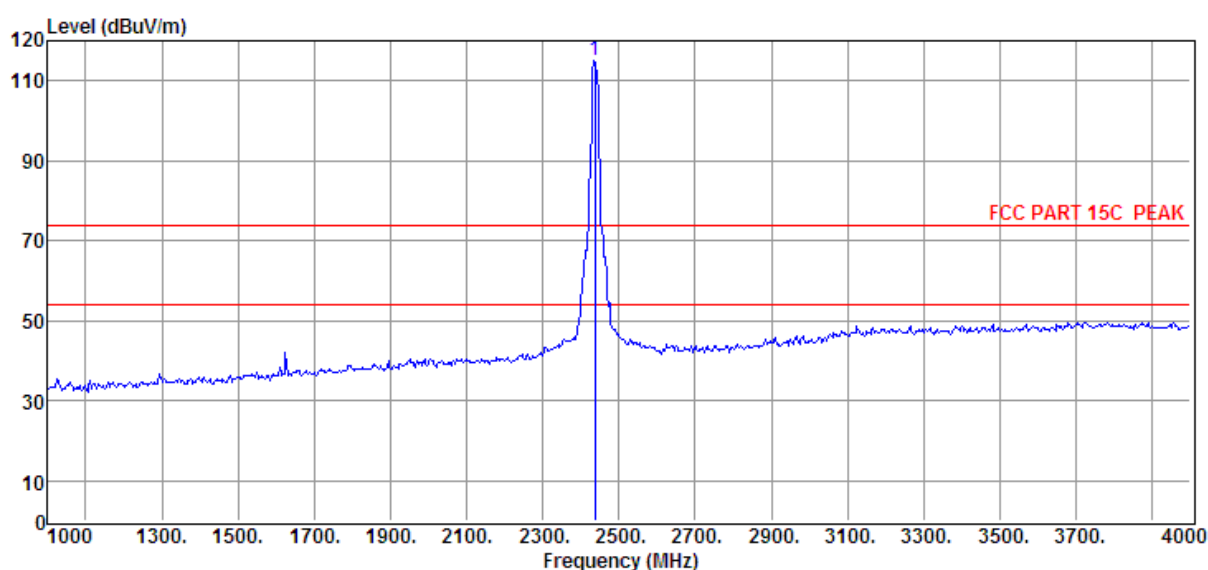
Note3: 2437MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 12



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2437.00	112.87	29.47	36.06	8.77	115.05	74.00	41.05	Peak	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

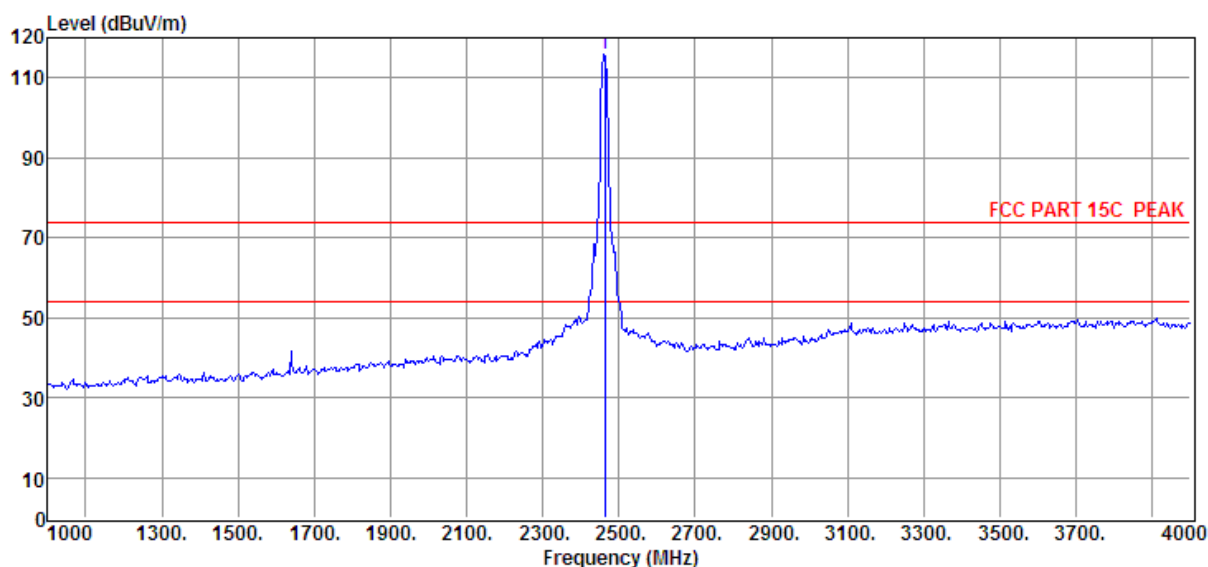
Note3: 2437MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 13



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2462.00	113.56	29.48	36.02	8.82	115.84	74.00	41.84	Peak	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

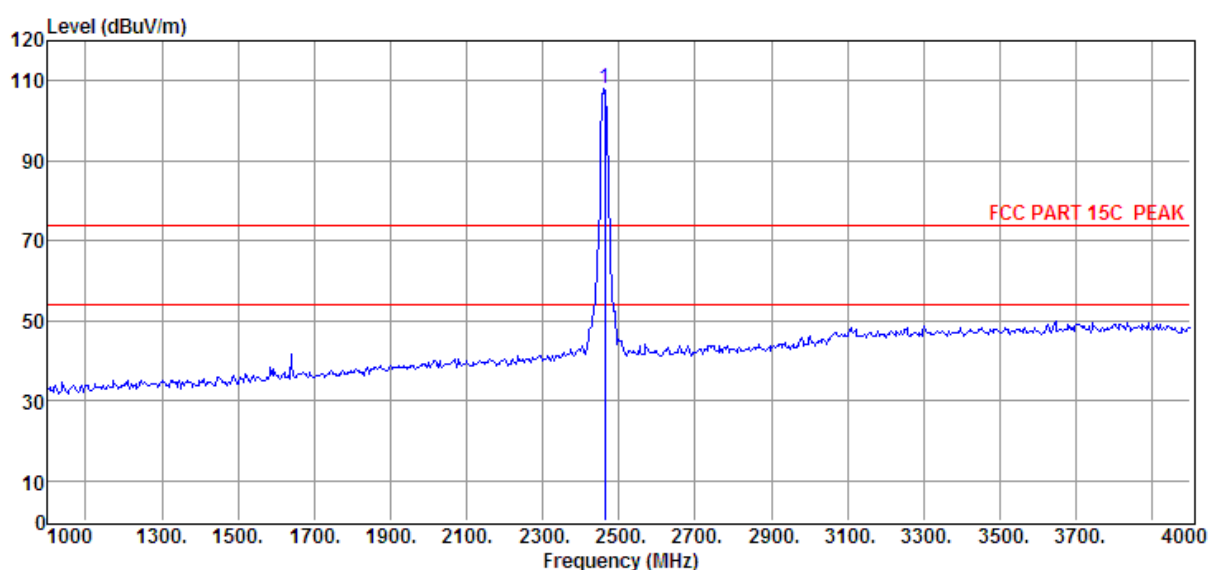
Note3: 2462MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 14



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2462.00	105.73	29.48	36.02	8.82	108.01	74.00	34.01	Peak	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

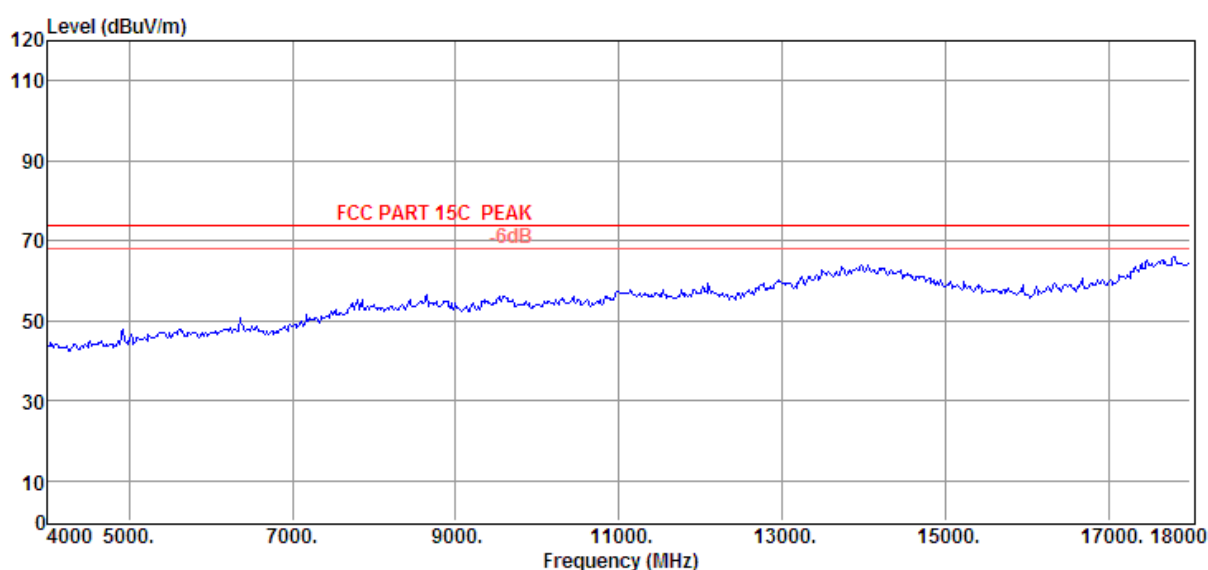
Note3: 2462MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 15



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

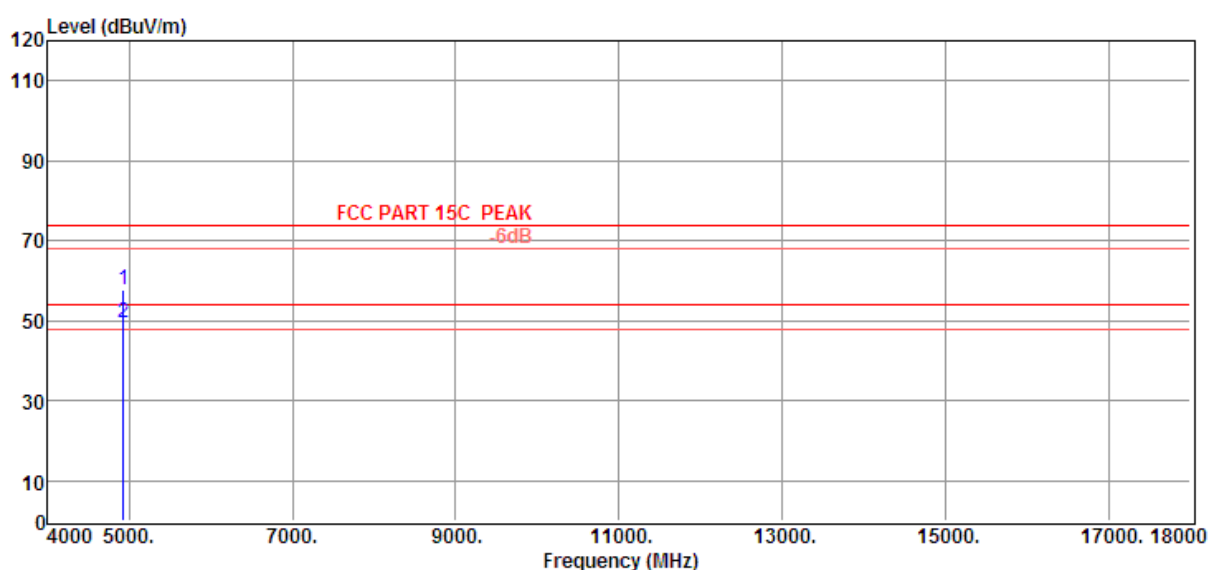
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 16



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	4924.00	46.20	34.49	35.34	12.50	57.85	74.00	-16.15	Peak	VERTICAL
2	4924.00	37.71	34.49	35.34	12.50	49.36	54.00	-4.64	Average	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

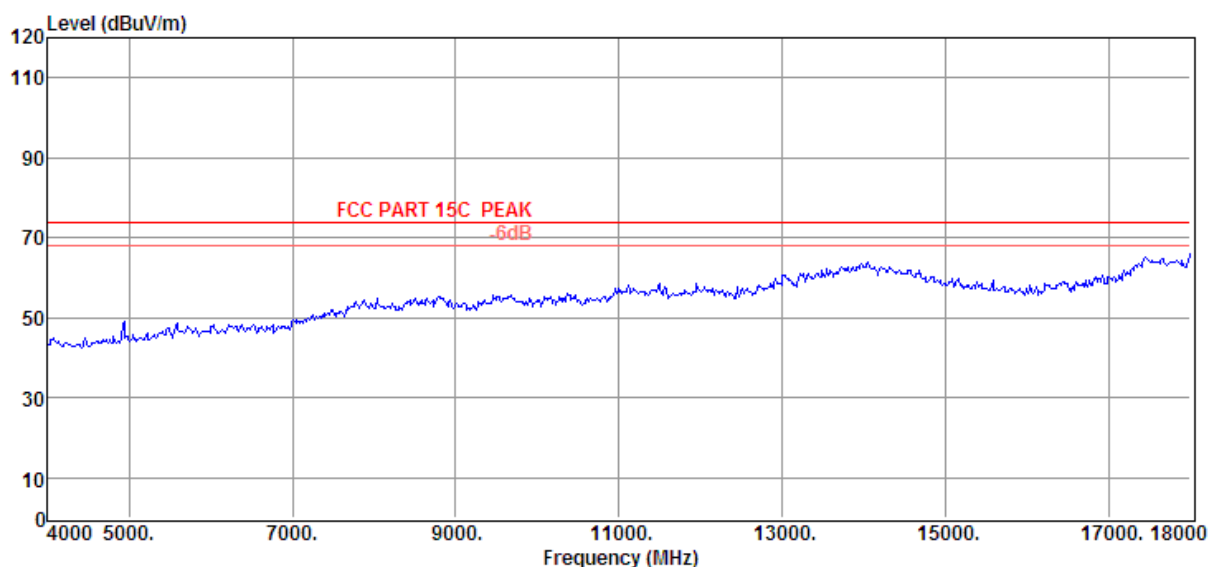
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 17



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

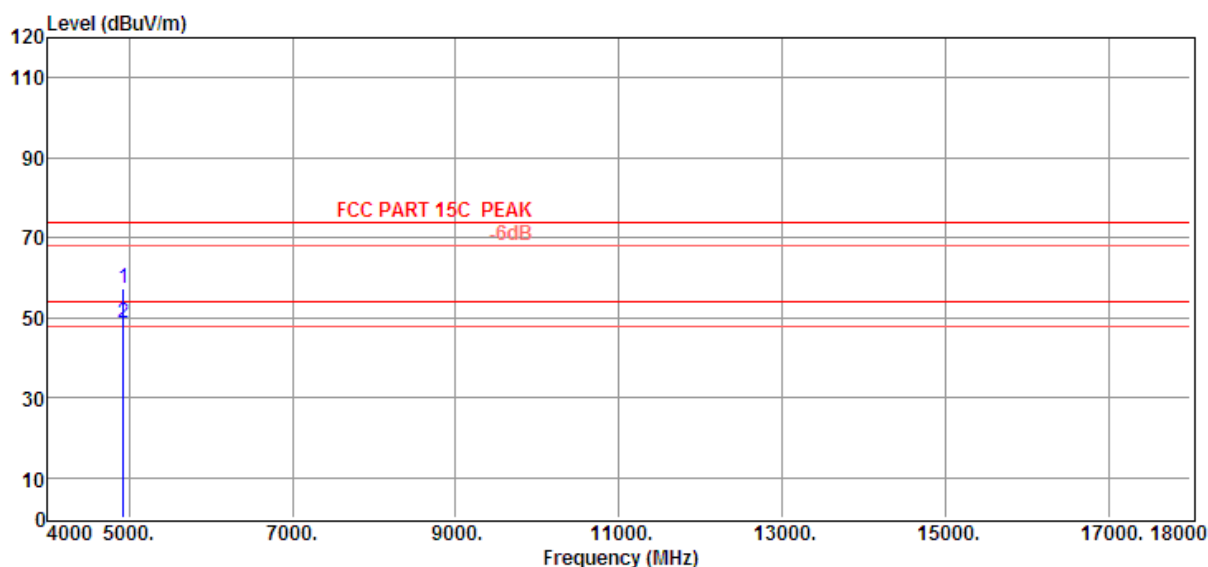
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 18



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	4924.00	45.65	34.49	35.34	12.50	57.30	74.00	-16.70	Peak	HORIZONTAL
2	4924.00	37.14	34.49	35.34	12.50	48.79	54.00	-5.21	Average	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

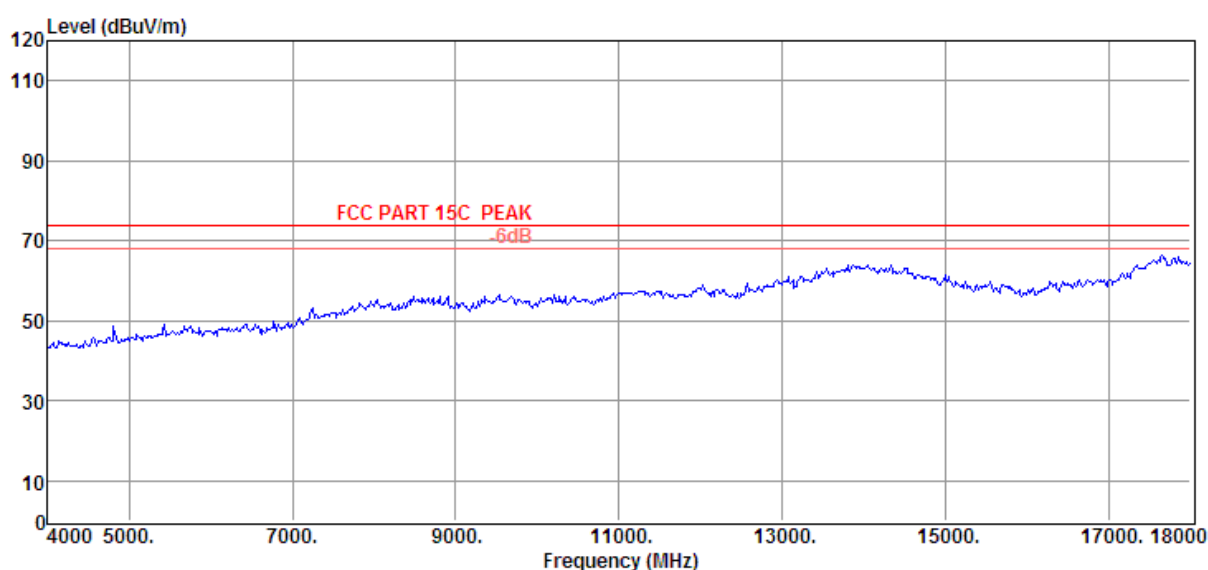
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 19



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

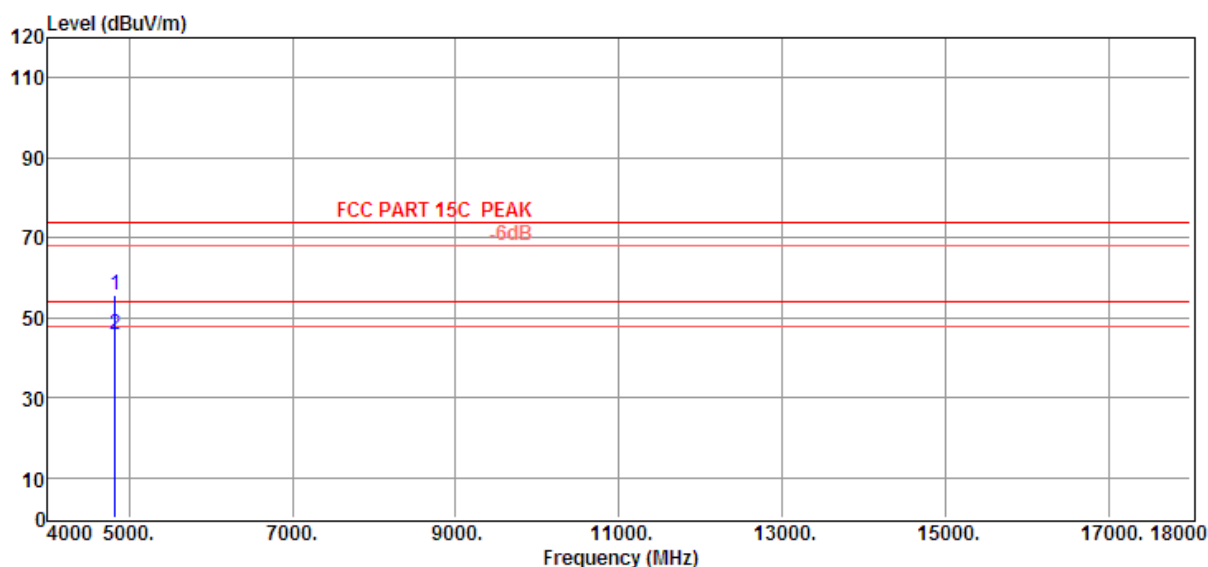
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 20



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	4824.00	44.07	34.32	35.25	12.38	55.52	74.00	-18.48	Peak	HORIZONTAL
2	4824.00	34.22	34.32	35.25	12.38	45.67	54.00	-8.33	Average	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

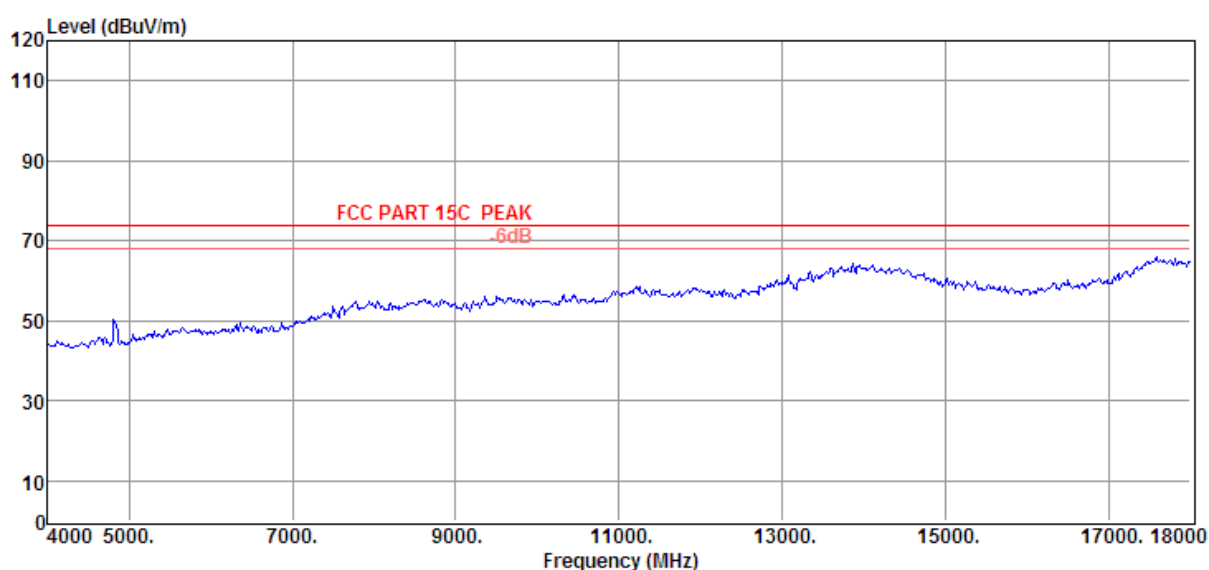
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 21



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

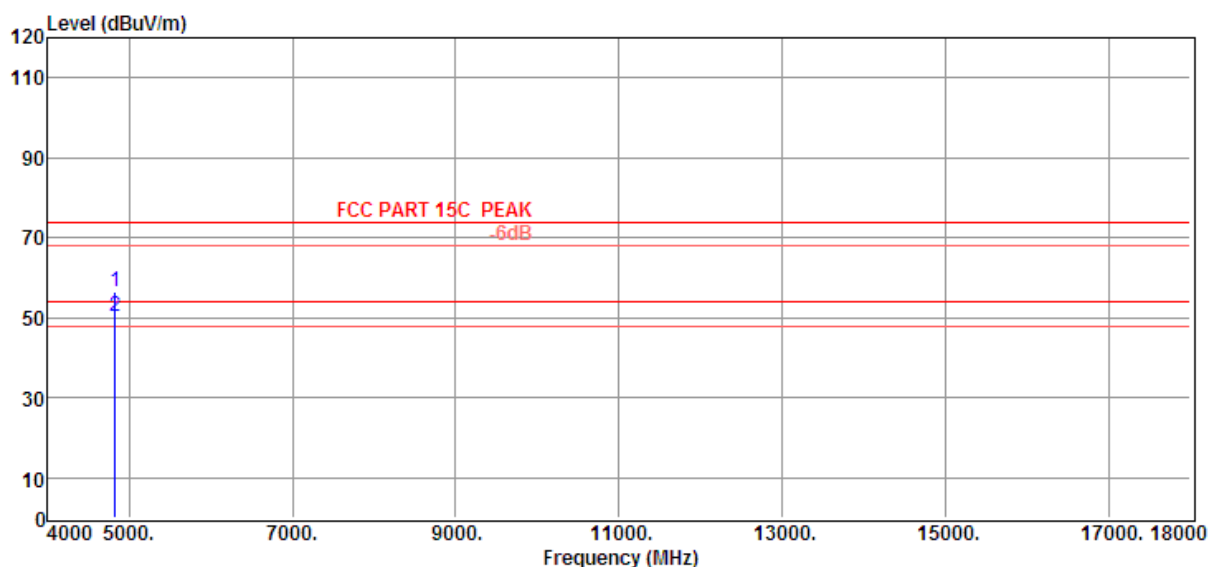
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 22



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	4824.00	45.05	34.32	35.25	12.38	56.50	74.00	-17.50	Peak	VERTICAL
2	4824.00	38.84	34.32	35.25	12.38	50.29	54.00	-3.71	Average	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

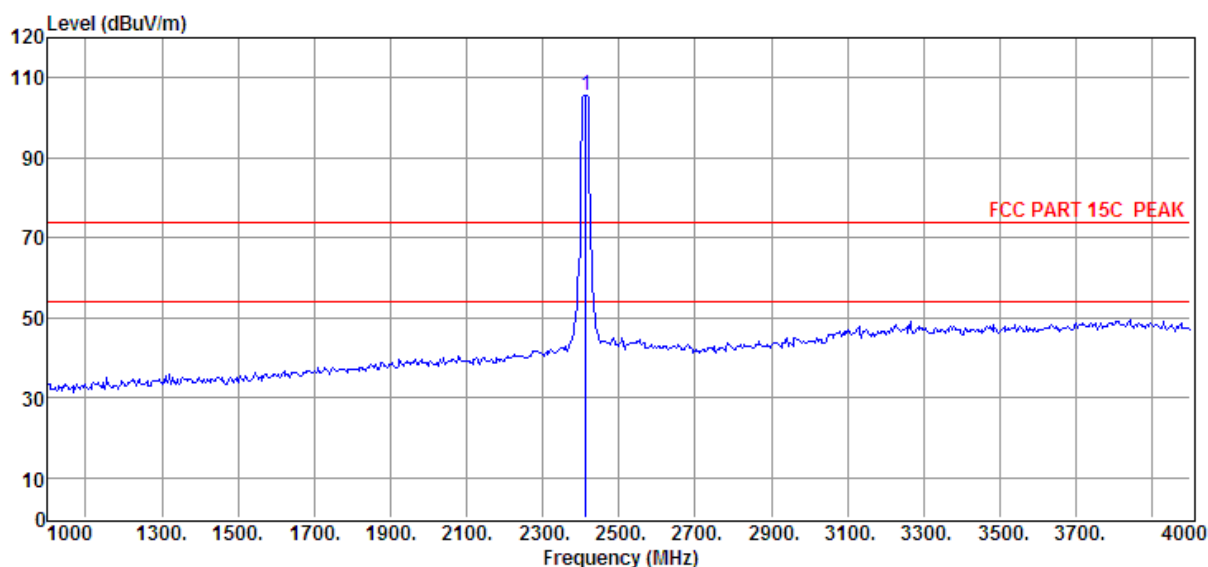
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 23



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2412.00	103.21	29.45	35.95	8.72	105.43	74.00	31.43	Peak	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

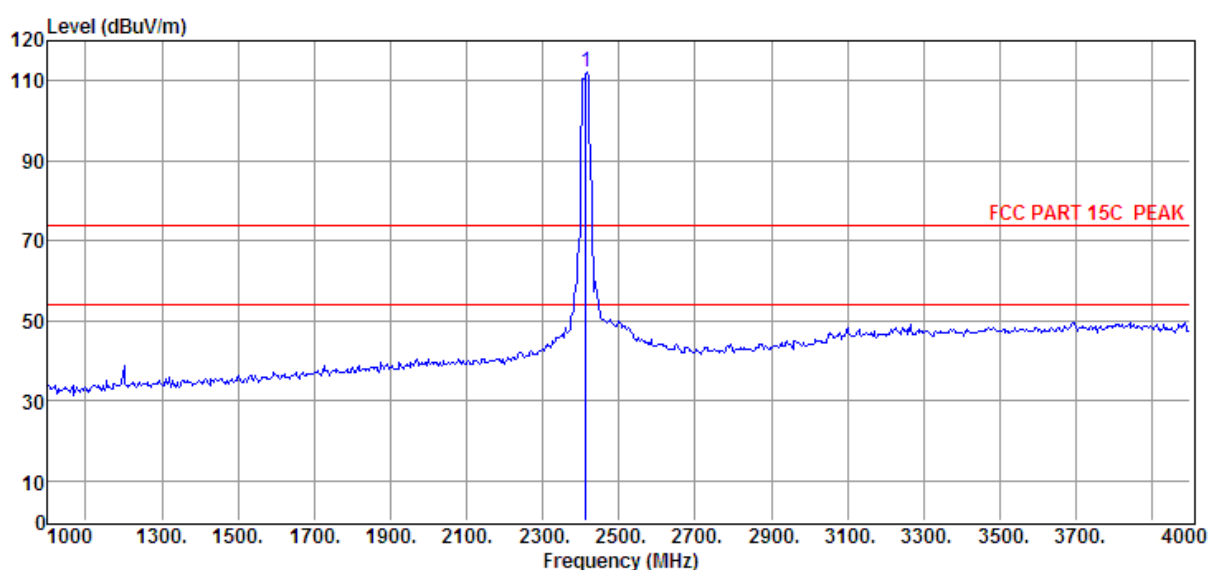
Note3: 2412MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 24



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2412.00	109.79	29.45	35.95	8.72	112.01	74.00	38.01	Peak	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

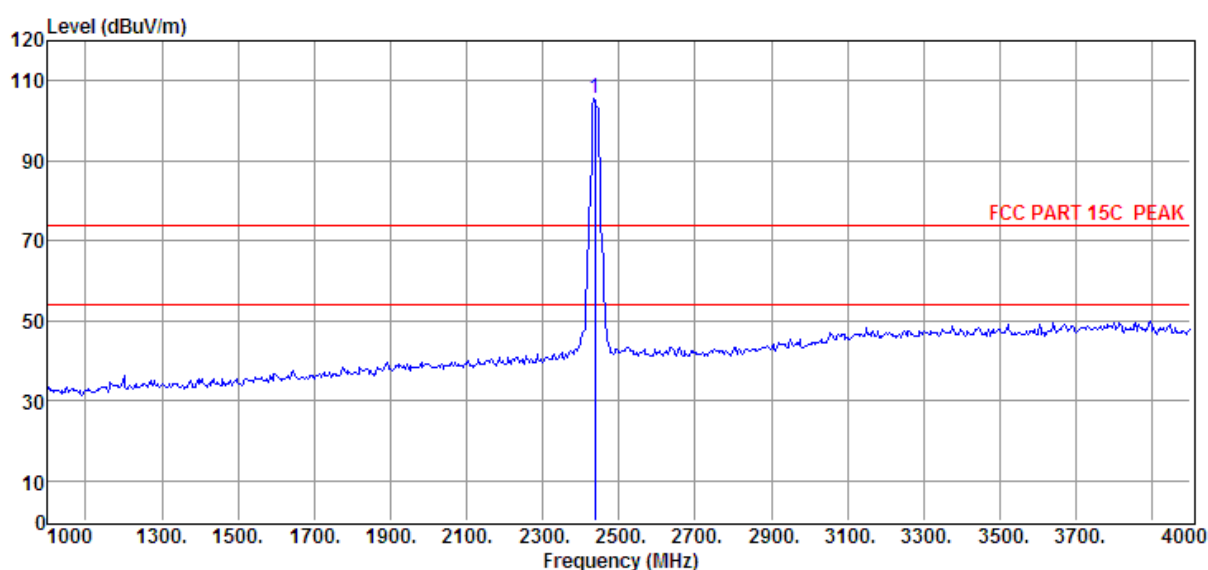
Note3: 2412MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 25



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2437.00	103.49	29.47	36.06	8.77	105.67	74.00	31.67	Peak	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

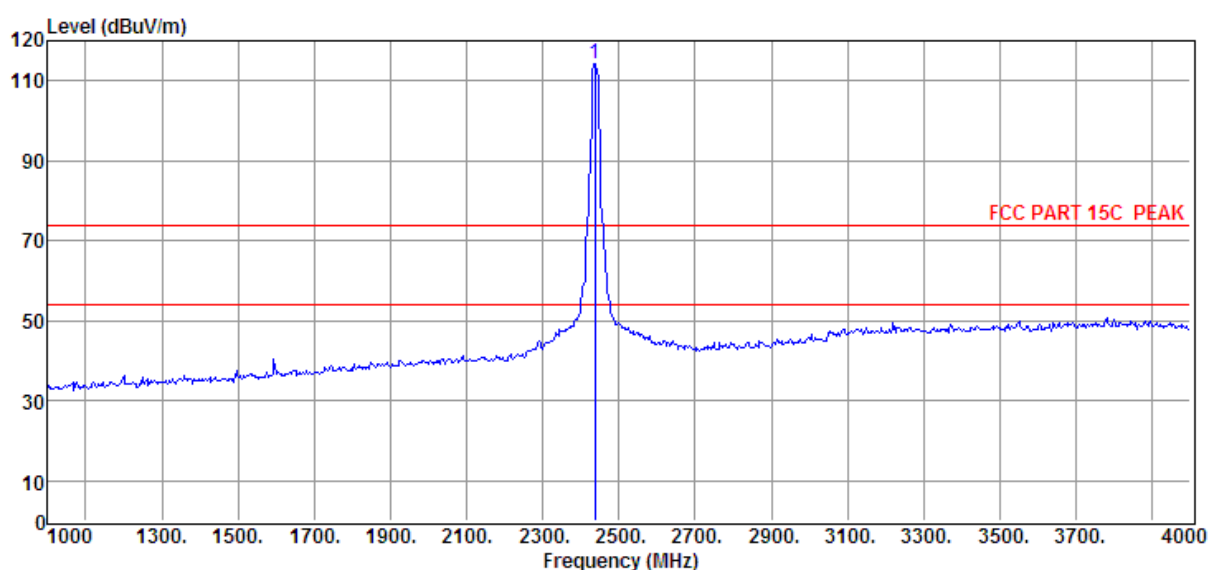
Note3: 2437MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 26



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2437.00	112.08	29.47	36.06	8.77	114.26	74.00	40.26	Peak	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

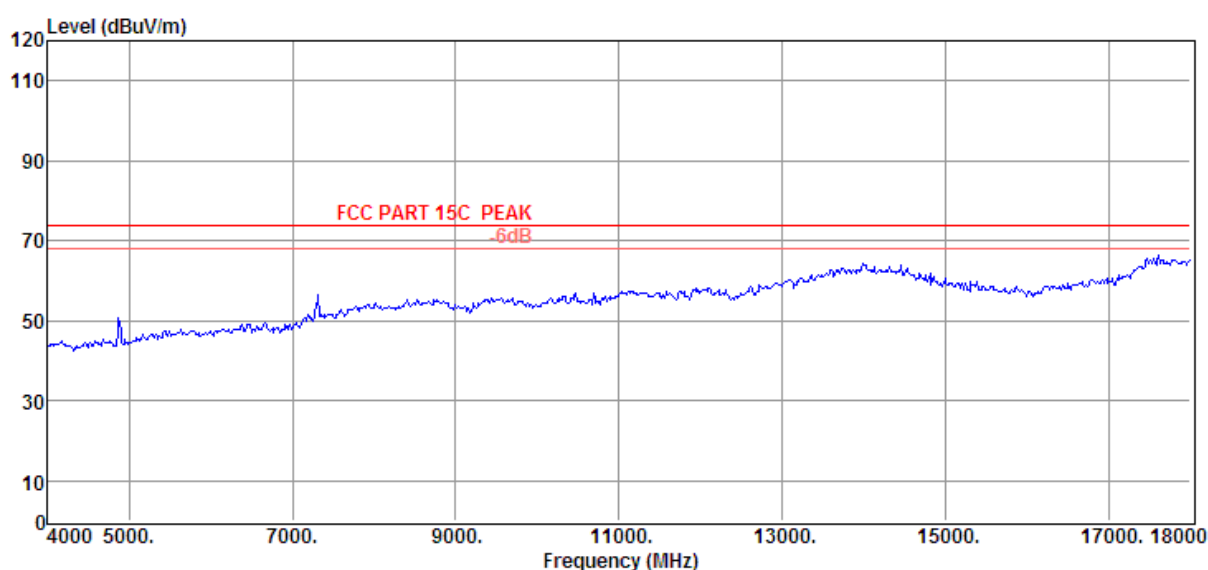
Note3: 2437MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 27



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

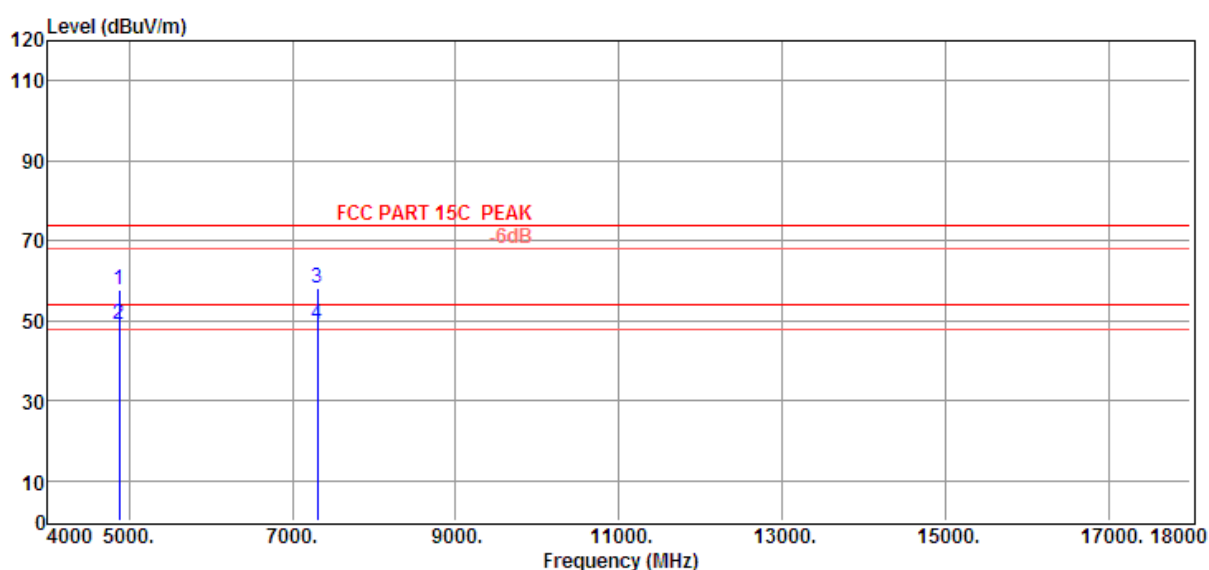
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 28



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	4874.00	46.19	34.41	35.36	12.44	57.68	74.00	-16.32	Peak	VERTICAL
2	4874.00	37.78	34.41	35.36	12.44	49.27	54.00	-4.73	Average	VERTICAL
3	7311.00	40.54	37.28	35.08	15.57	58.31	74.00	-15.69	Peak	VERTICAL
4	7311.00	31.40	37.28	35.08	15.57	49.17	54.00	-4.83	Average	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

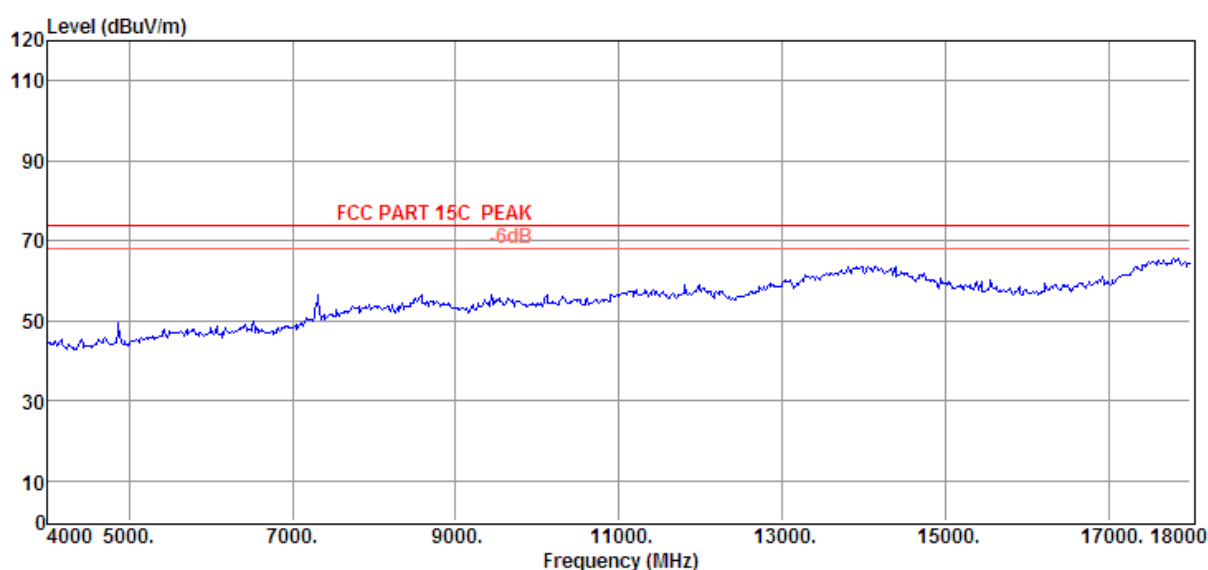
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 29



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

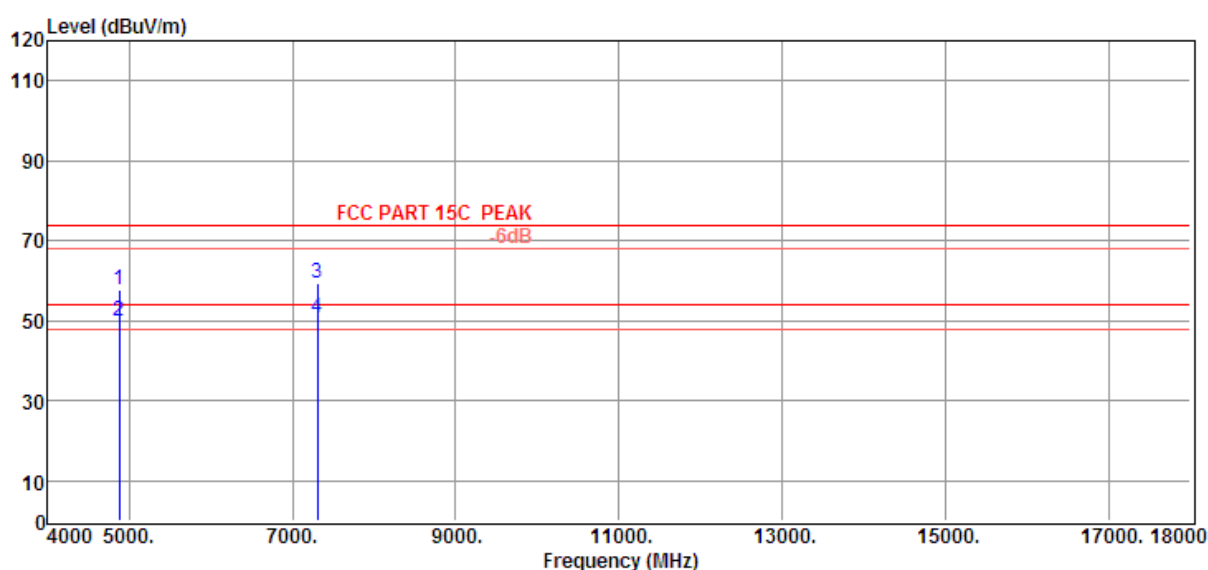
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 30



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	4874.00	46.07	34.41	35.36	12.44	57.56	74.00	-16.44	Peak	HORIZONTAL
2	4874.00	38.20	34.41	35.36	12.44	49.69	54.00	-4.31	Average	HORIZONTAL
3	7311.00	41.70	37.28	35.08	15.57	59.47	74.00	-14.53	Peak	HORIZONTAL
4	7311.00	32.85	37.28	35.08	15.57	50.62	54.00	-3.38	Average	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

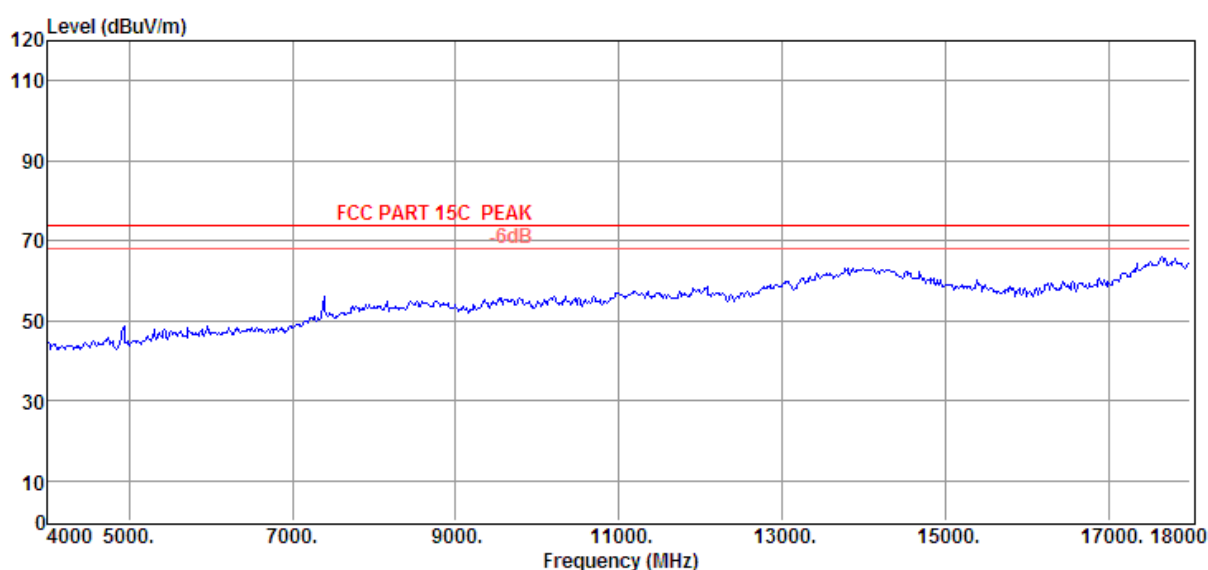
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 31



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

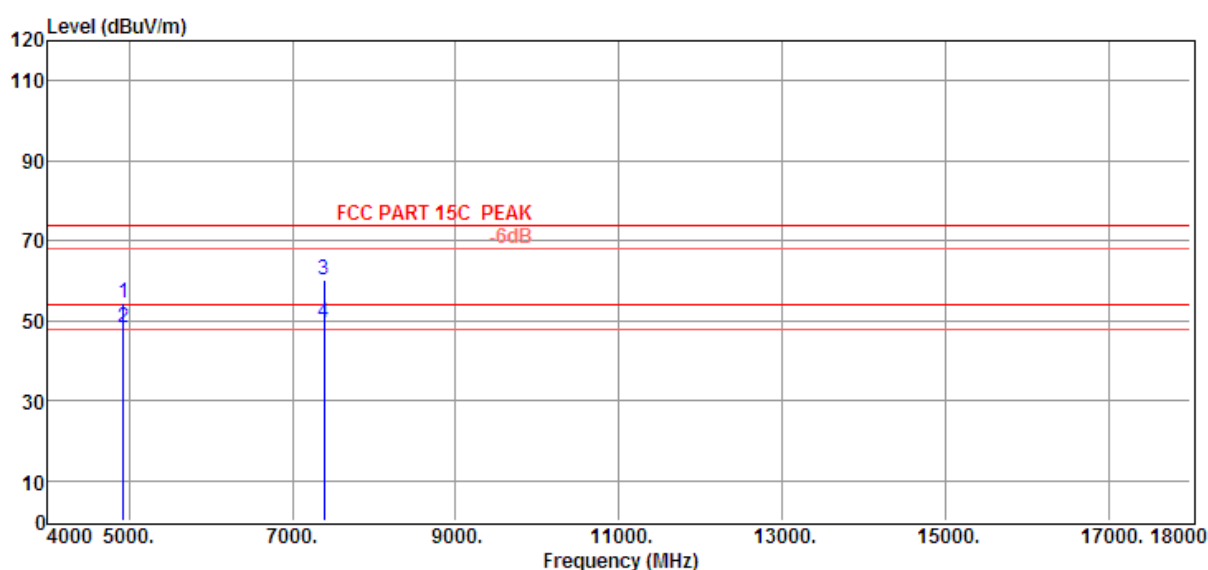
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 32



Item (Mark)	Freq (MHz)	Read Level (dBUV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBUV/m)	Limit Line (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	4924.00	42.85	34.49	35.34	12.50	54.50	74.00	-19.50	Peak	HORIZONTAL
2	4924.00	36.58	34.49	35.34	12.50	48.23	54.00	-5.77	Average	HORIZONTAL
3	7386.00	41.68	37.74	35.09	15.70	60.03	74.00	-13.97	Peak	HORIZONTAL
4	7386.00	31.01	37.74	35.09	15.70	49.36	54.00	-4.64	Average	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

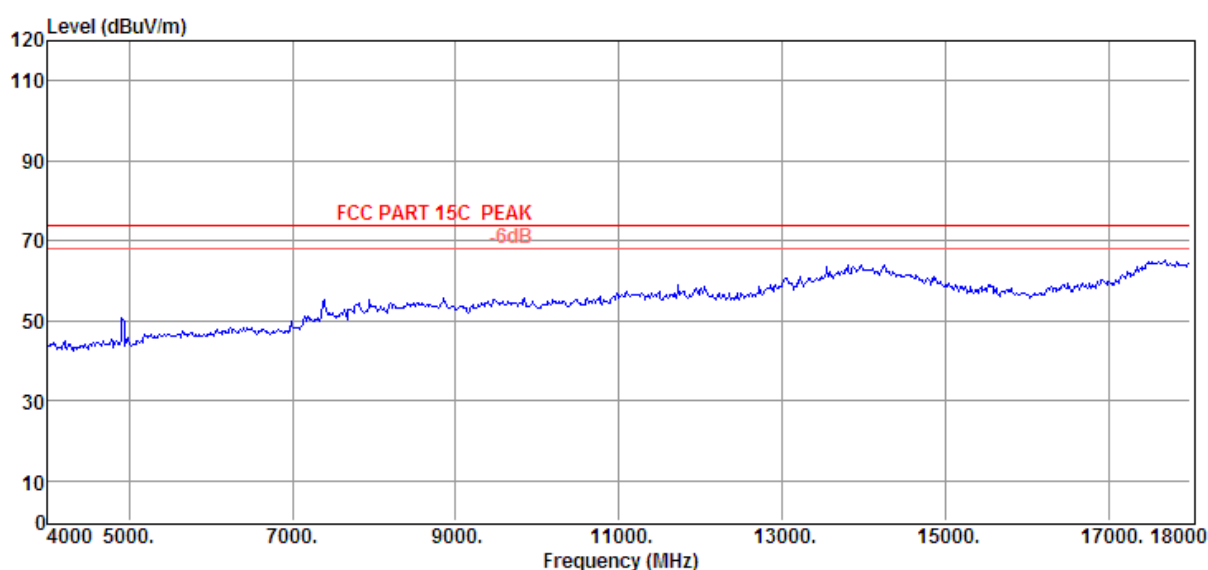
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 33



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

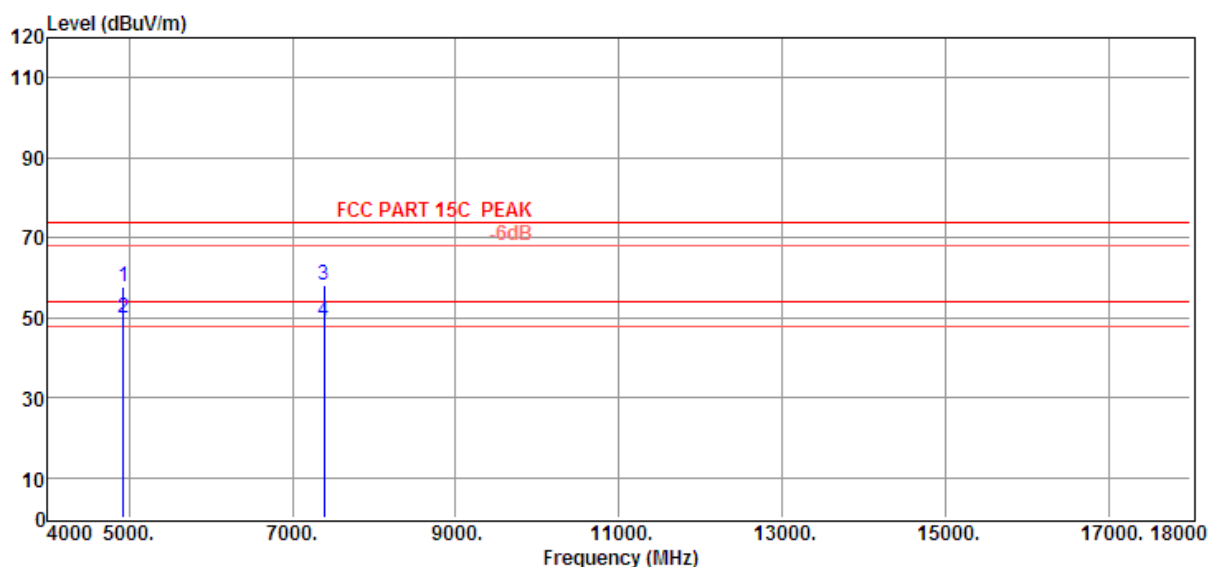
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 34



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	4924.00	45.90	34.49	35.34	12.50	57.55	74.00	-16.45	Peak	VERTICAL
2	4924.00	38.41	34.49	35.34	12.50	50.06	54.00	-3.94	Average	VERTICAL
3	7386.00	39.93	37.74	35.09	15.70	58.28	74.00	-15.72	Peak	VERTICAL
4	7386.00	30.74	37.74	35.09	15.70	49.09	54.00	-4.91	Average	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

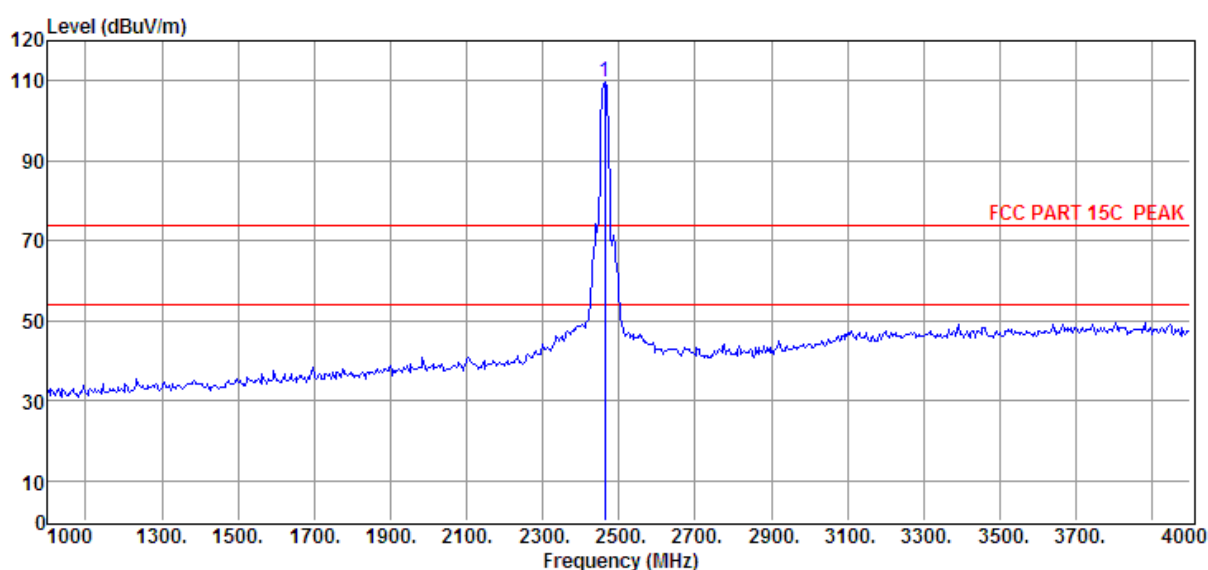
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 35



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2462.00	107.54	29.48	36.02	8.82	109.82	74.00	35.82	Peak	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

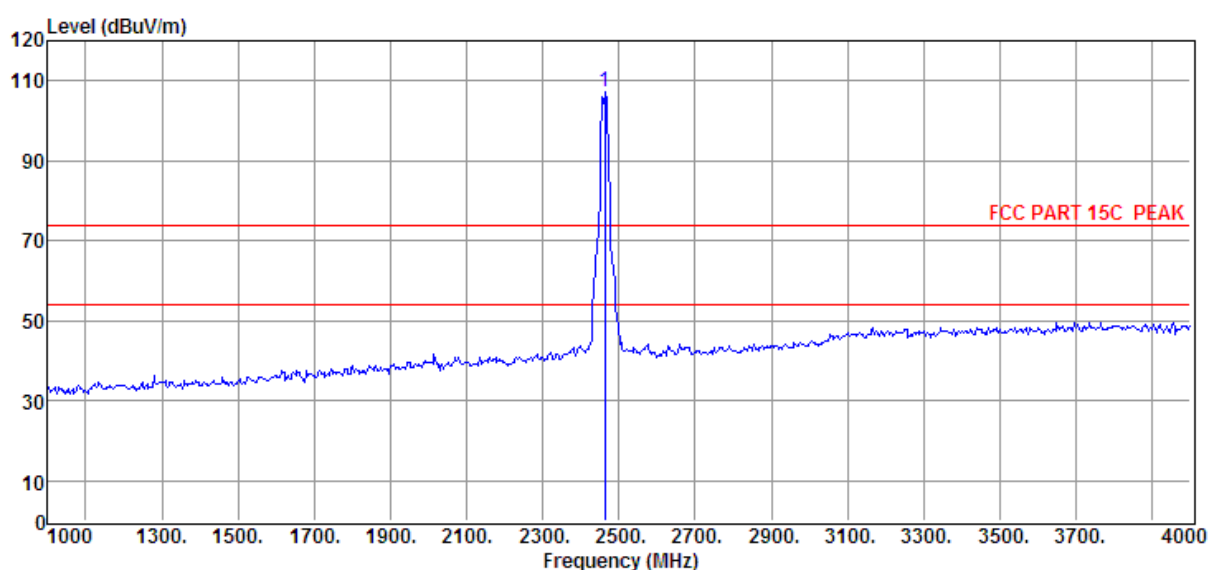
Note3: 2462MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 36



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2462.00	104.96	29.48	36.02	8.82	107.24	74.00	33.24	Peak	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

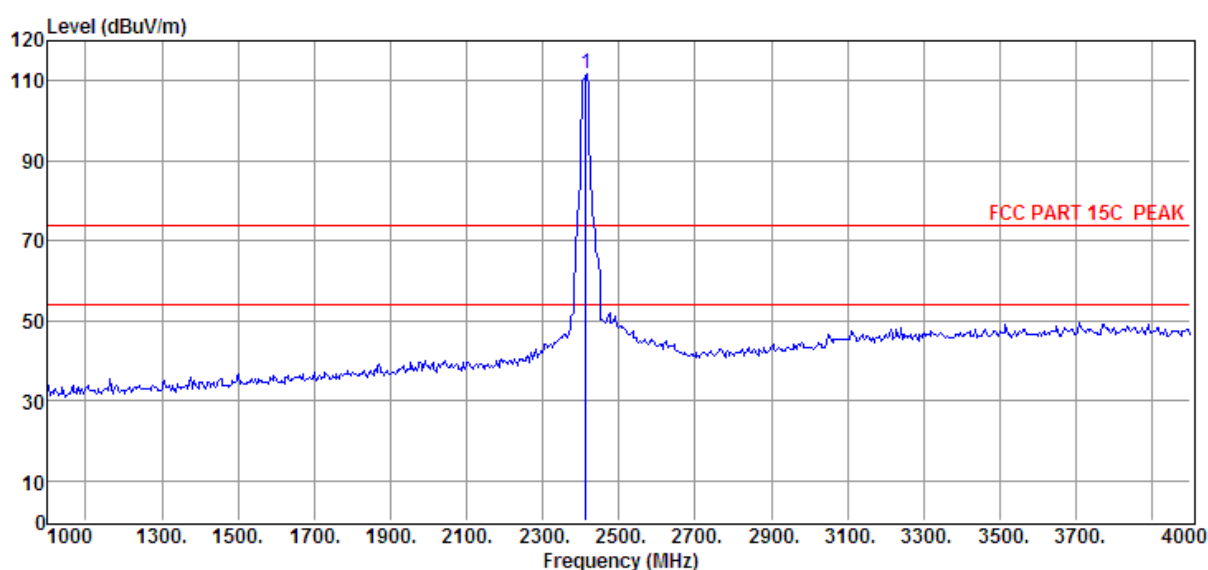
Note3: 2462MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 37



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2412.00	109.47	29.45	35.95	8.72	111.69	74.00	37.69	Peak	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

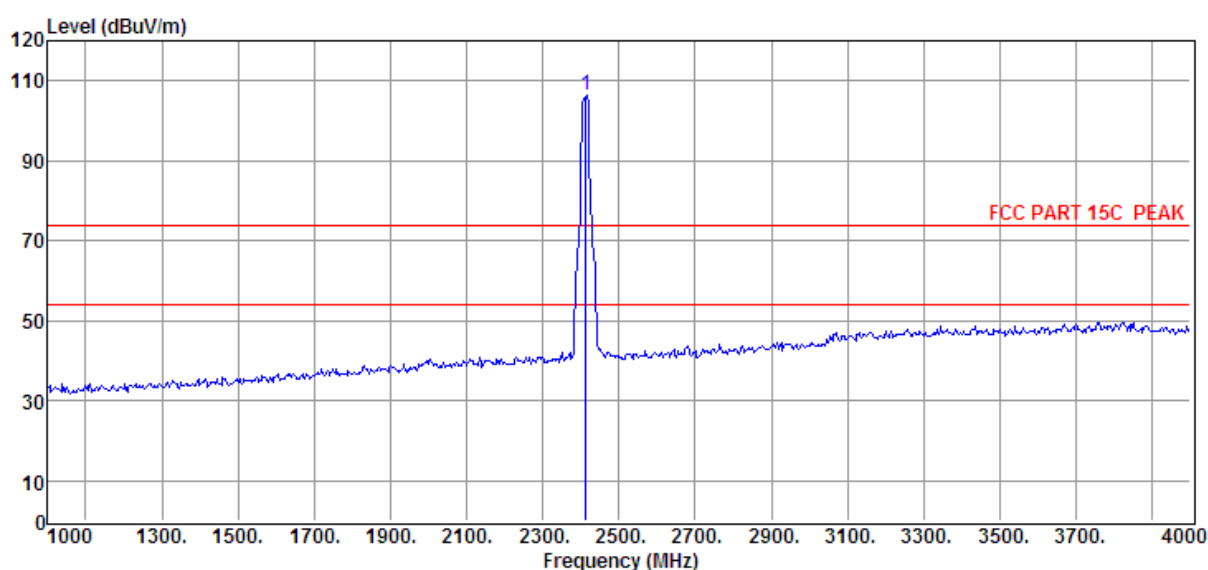
Note3: 2412MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 38



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2412.00	104.14	29.45	35.95	8.72	106.36	74.00	32.36	Peak	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

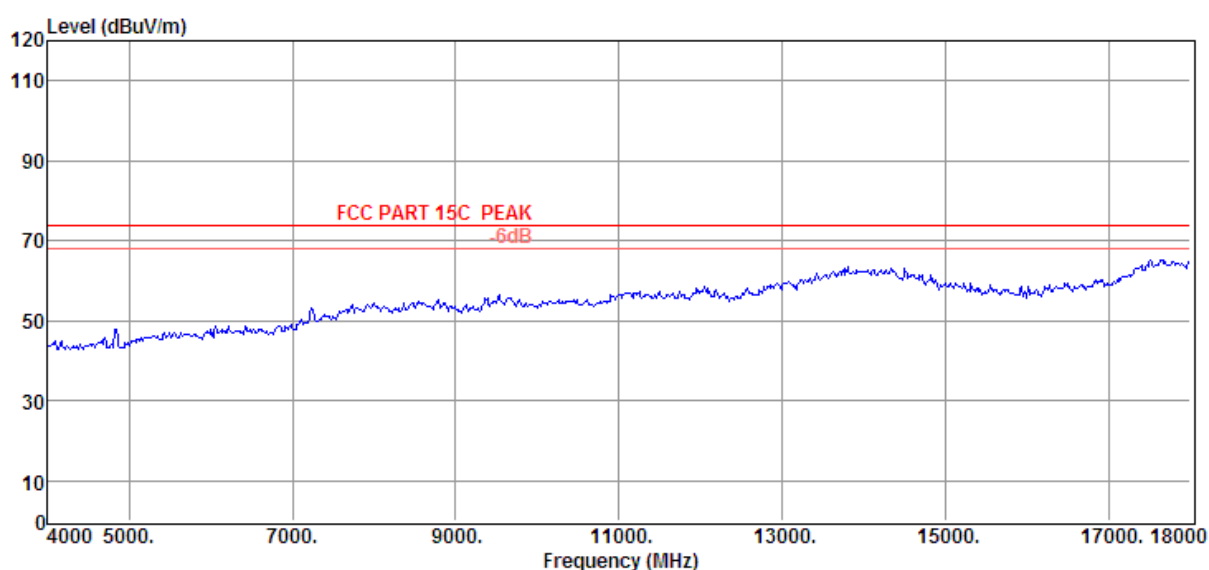
Note3: 2412MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 39



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

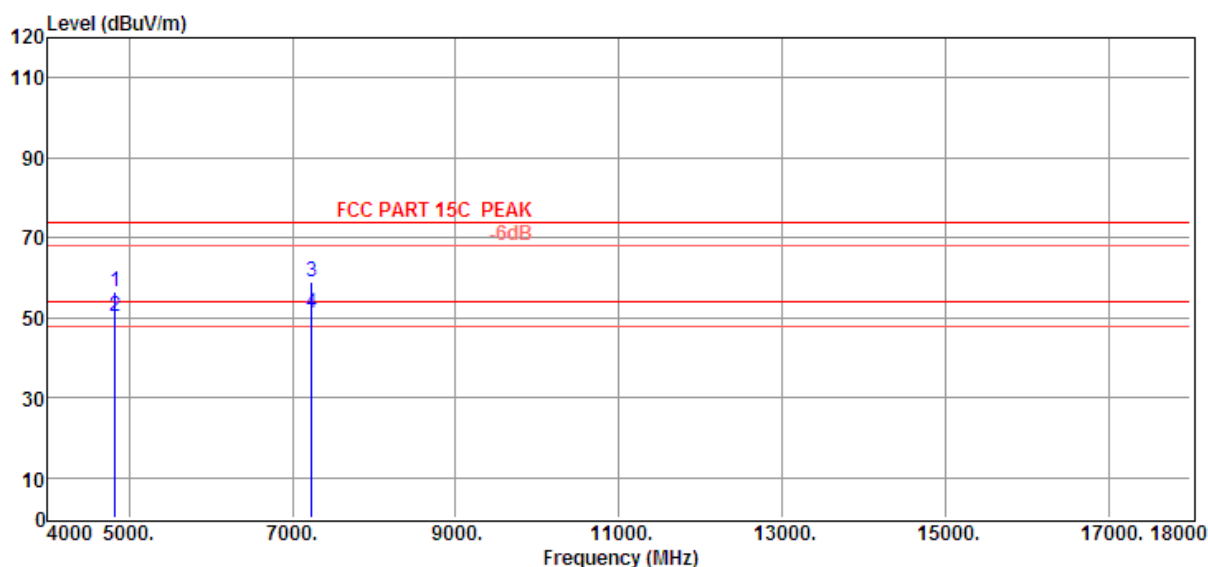
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 40



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	4824.00	45.21	34.32	35.25	12.38	56.66	74.00	-17.34	Peak	VERTICAL
2	4824.00	38.89	34.32	35.25	12.38	50.34	54.00	-3.66	Average	VERTICAL
3	7236.00	41.57	36.90	34.94	15.45	58.98	74.00	-15.02	Peak	VERTICAL
4	7236.00	33.54	36.90	34.94	15.45	50.95	54.00	-3.05	Average	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

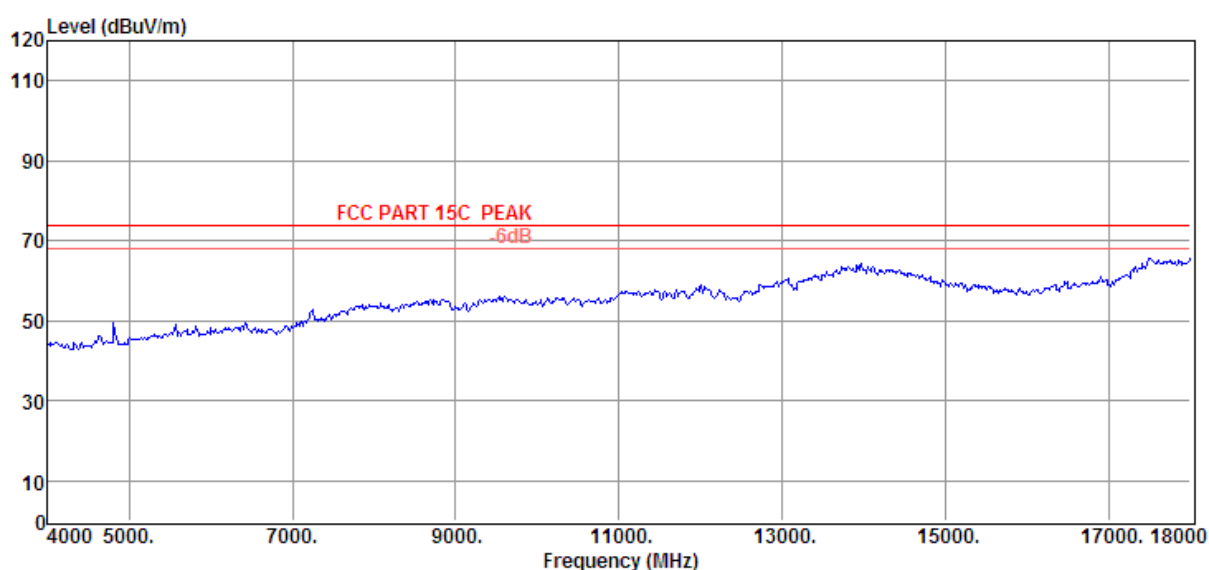
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 41



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



E:\2012 TEST DATA\D\12Q0056

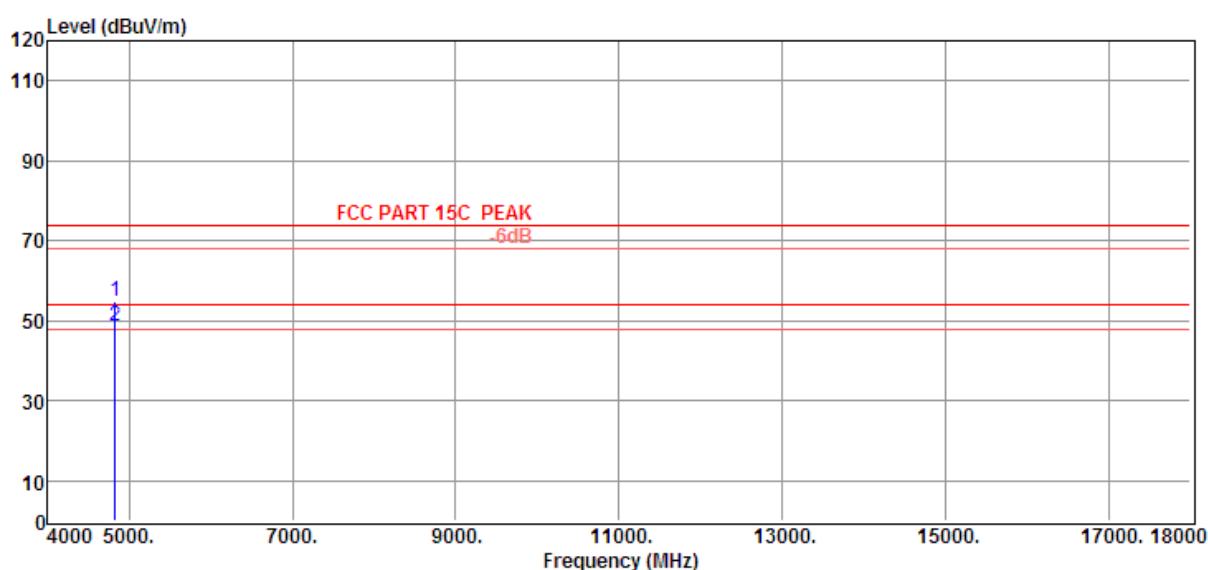
Tested By : TaTa Chen

Model Number : ALVO SmartPAD 2

Test Mode : IEEE802.11n HT20 CH1 2412MHz Tx

Antenna/Distance : 3115(0911)/3m/HORIZONTAL

Data: 42



Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμ V)	(dB/m)	dB	dB	(dBμ V/m)	(dBμ V/m)	(dB)		
1	4824.00	43.20	34.32	35.25	12.38	54.65	74.00	-19.35	Peak	HORIZONTAL
2	4824.00	37.24	34.32	35.25	12.38	48.69	54.00	-5.31	Average	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

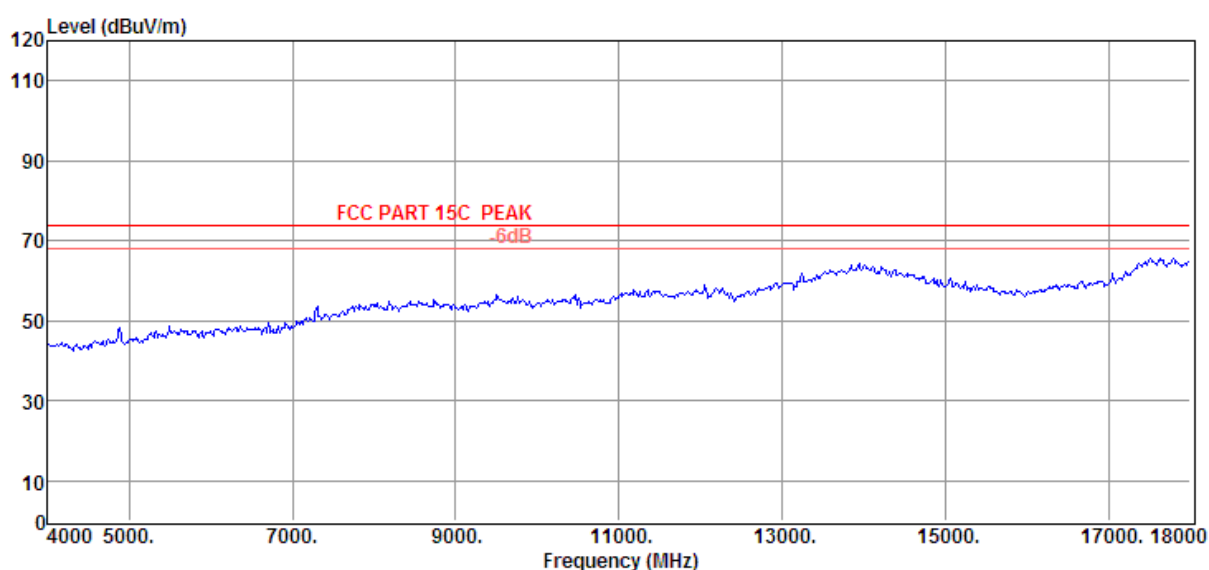
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 43



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

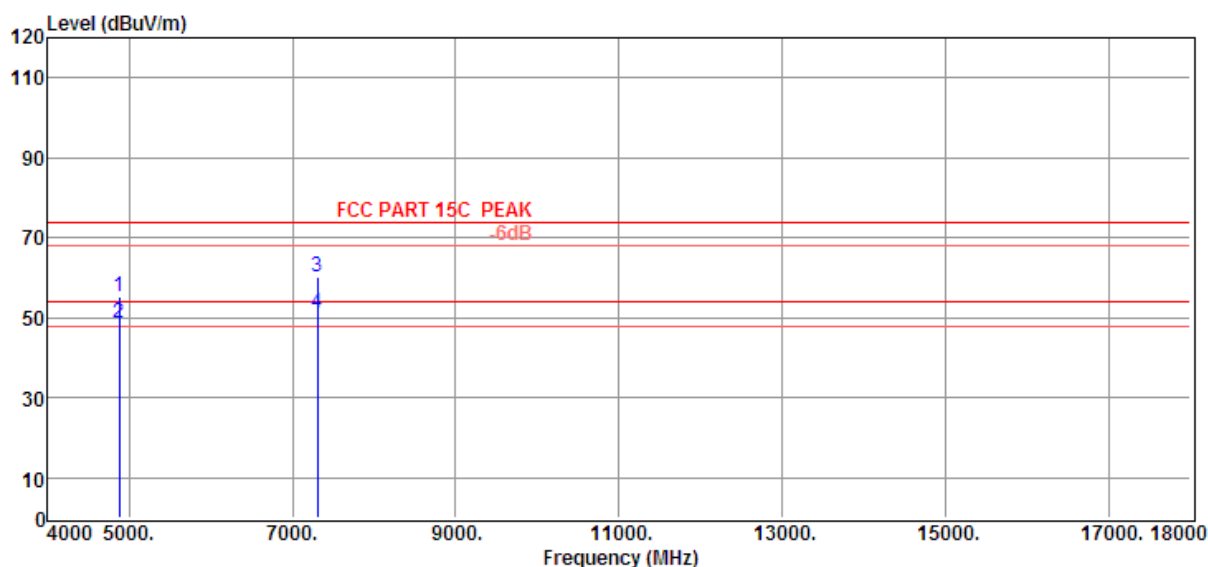
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 44



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level (dBμV)	Factor (dB/m)	Factor dB	Loss dB	Level (dBμV/m)	Line (dBμV/m)	Limit (dB)		
1	4874.00	43.88	34.41	35.36	12.44	55.37	74.00	-18.63	Peak	HORIZONTAL
2	4874.00	37.13	34.41	35.36	12.44	48.62	54.00	-5.38	Average	HORIZONTAL
3	7311.00	42.29	37.28	35.08	15.57	60.06	74.00	-13.94	Peak	HORIZONTAL
4	7311.00	33.23	37.28	35.08	15.57	51.00	54.00	-3.00	Average	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

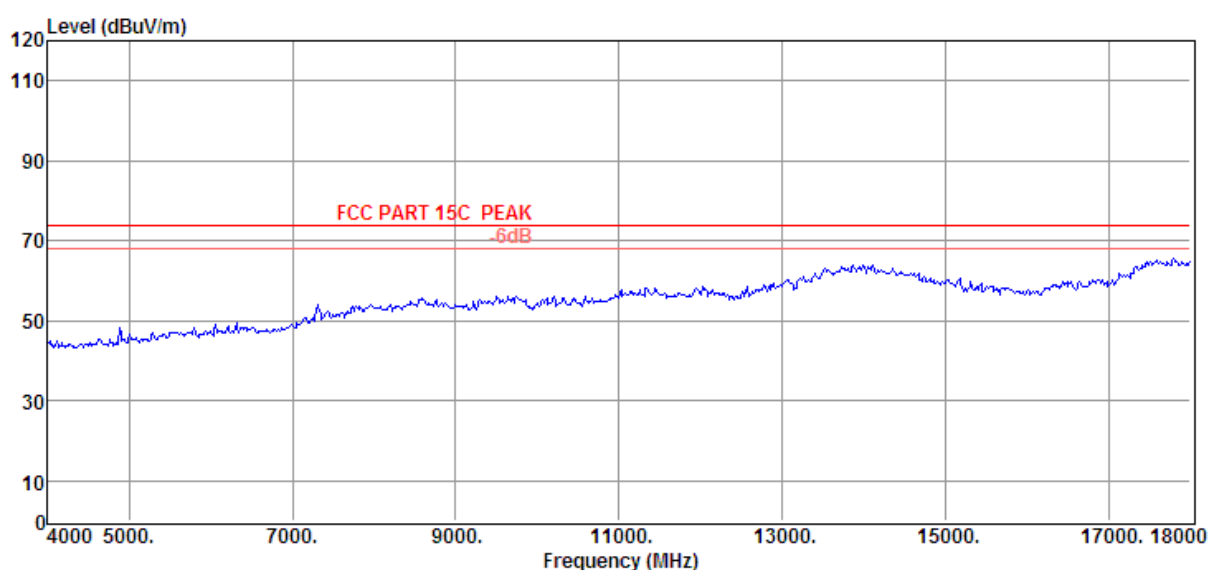
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 45



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

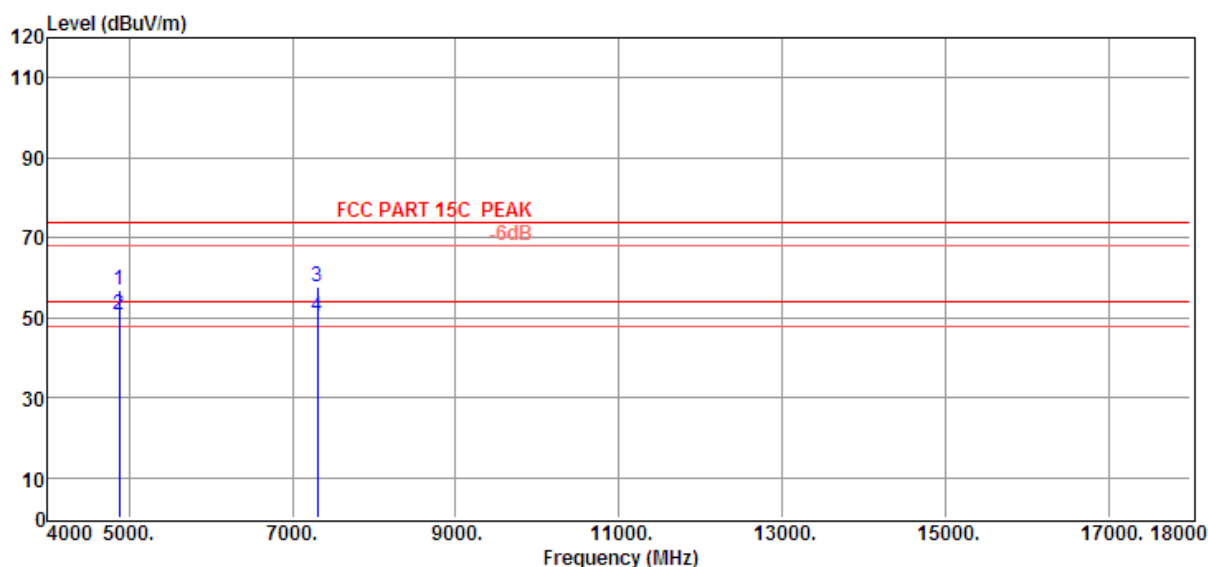
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 46



Item (Mark)	Freq (MHz)	Read Level (dBUV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBUV/m)	Limit Line (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	4874.00	45.47	34.41	35.36	12.44	56.96	74.00	-17.04	Peak	VERTICAL
2	4874.00	39.20	34.41	35.36	12.44	50.69	54.00	-3.31	Average	VERTICAL
3	7311.00	40.04	37.28	35.08	15.57	57.81	74.00	-16.19	Peak	VERTICAL
4	7311.00	32.59	37.28	35.08	15.57	50.36	54.00	-3.64	Average	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

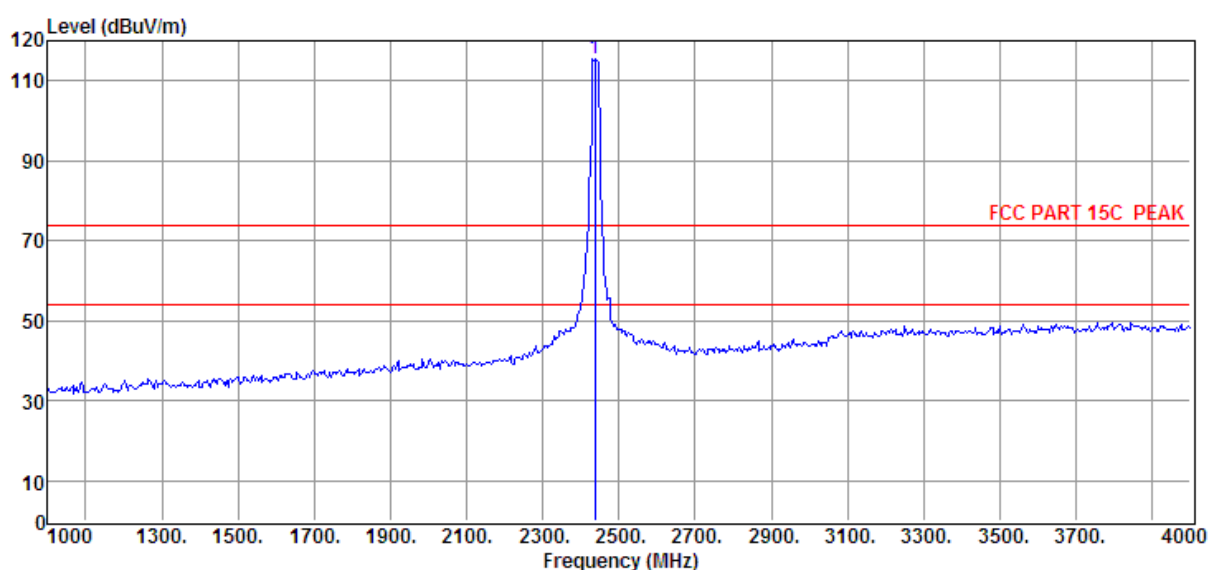
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 47



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2437.00	113.43	29.47	36.06	8.77	115.61	74.00	41.61	Peak	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

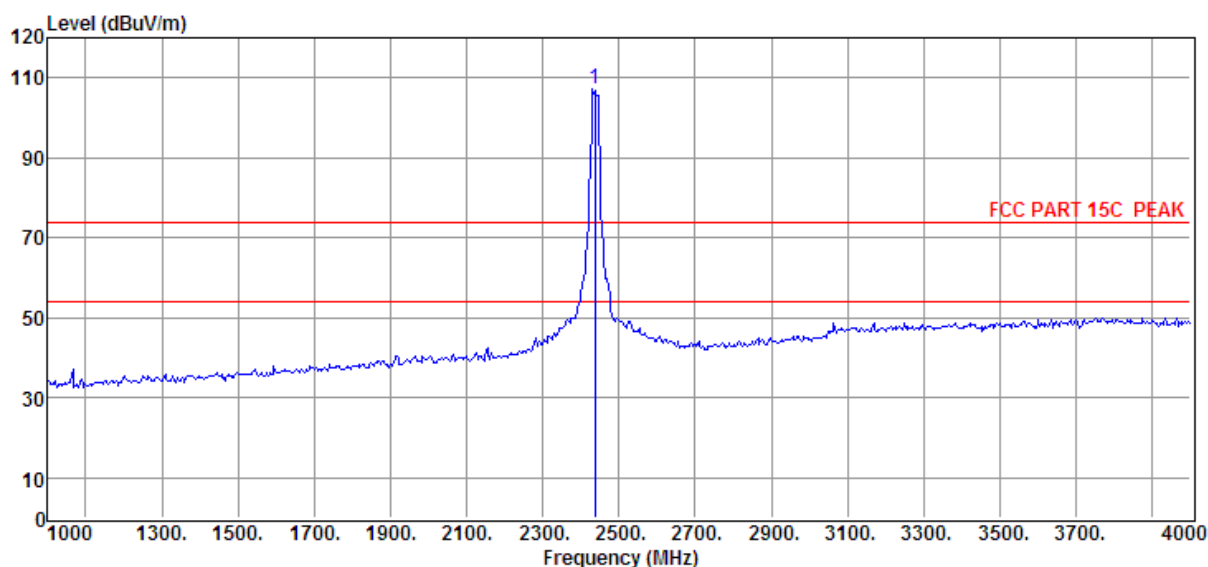
Note3: 2437MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH6 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 48



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2437.00	105.08	29.47	36.06	8.77	107.26	74.00	33.26	Peak	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

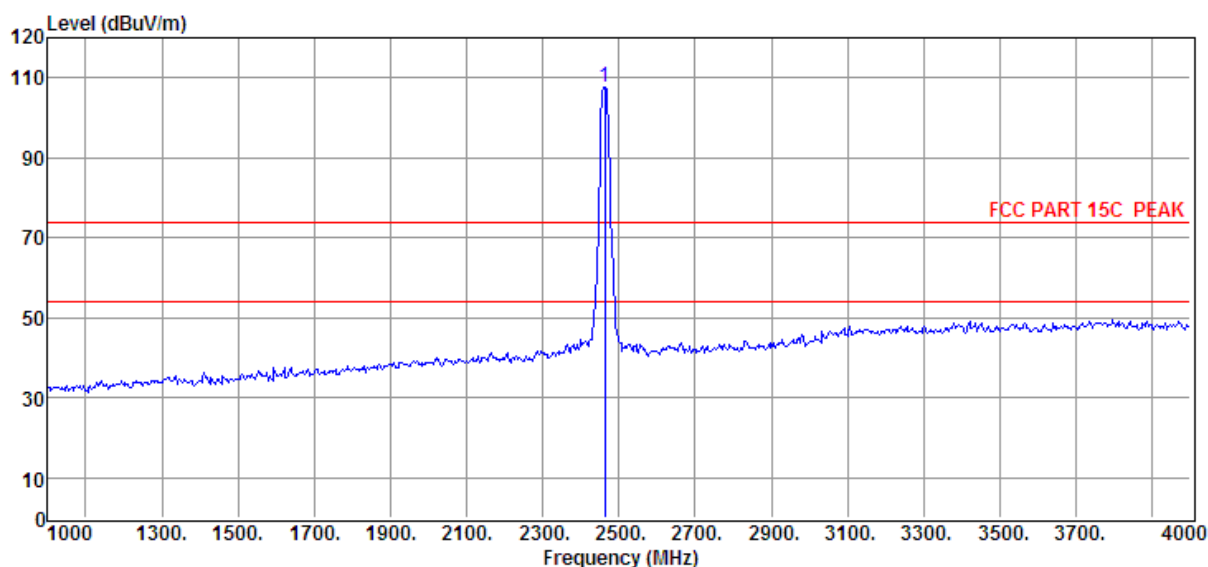
Note3: 2437MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 49



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2462.00	105.41	29.48	36.02	8.82	107.69	74.00	33.69	Peak	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

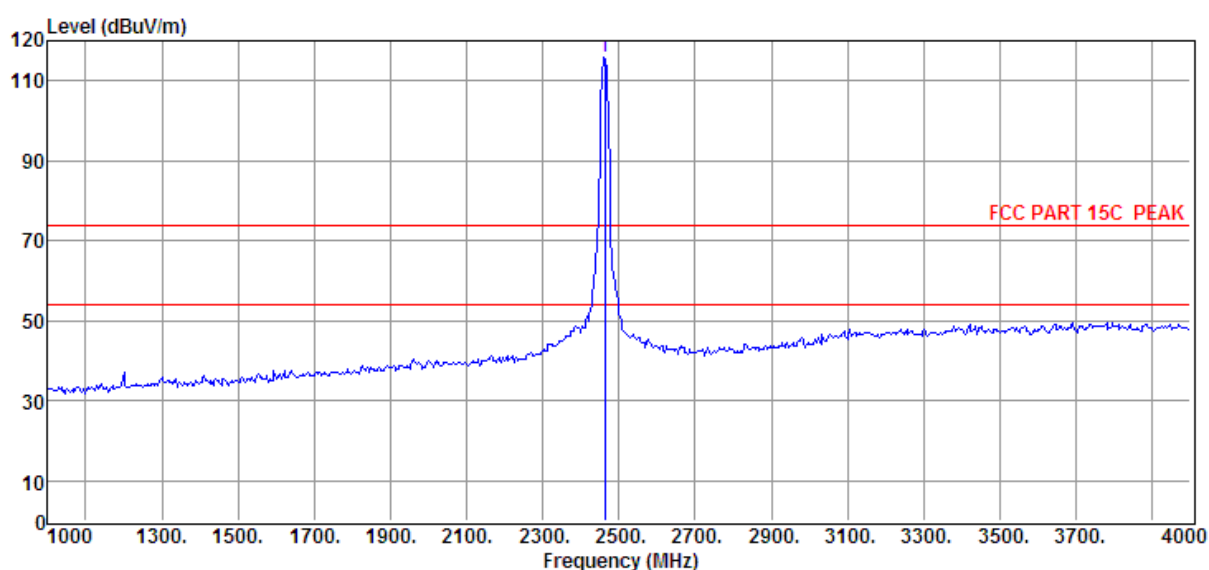
Note3: 2462MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 50



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2462.00	113.66	29.48	36.02	8.82	115.94	74.00	41.94	Peak	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

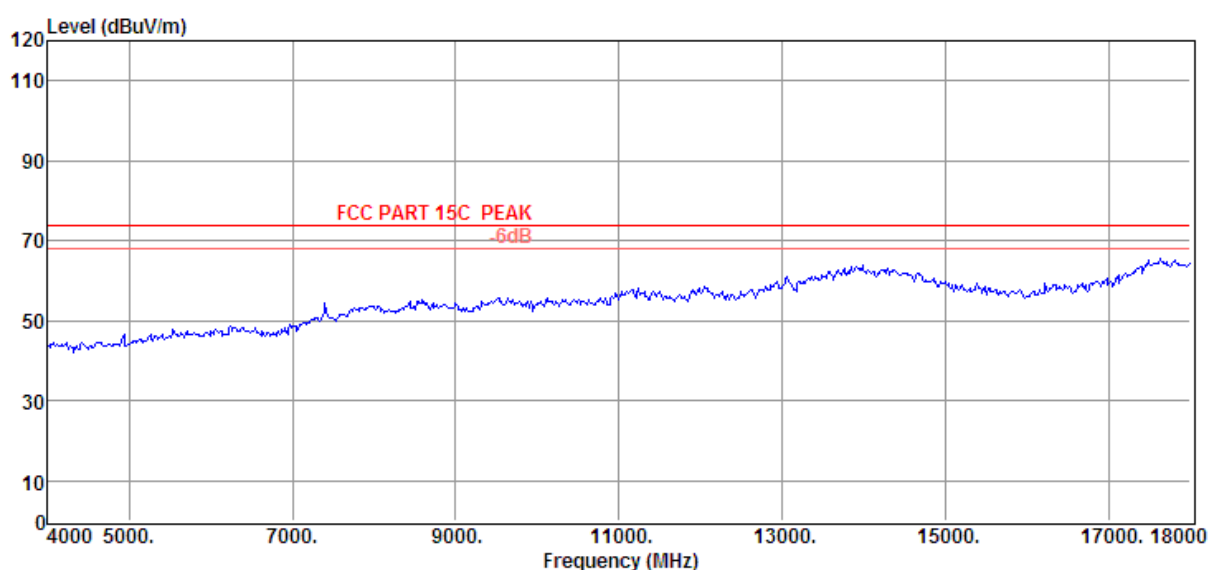
Note3: 2462MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 51



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

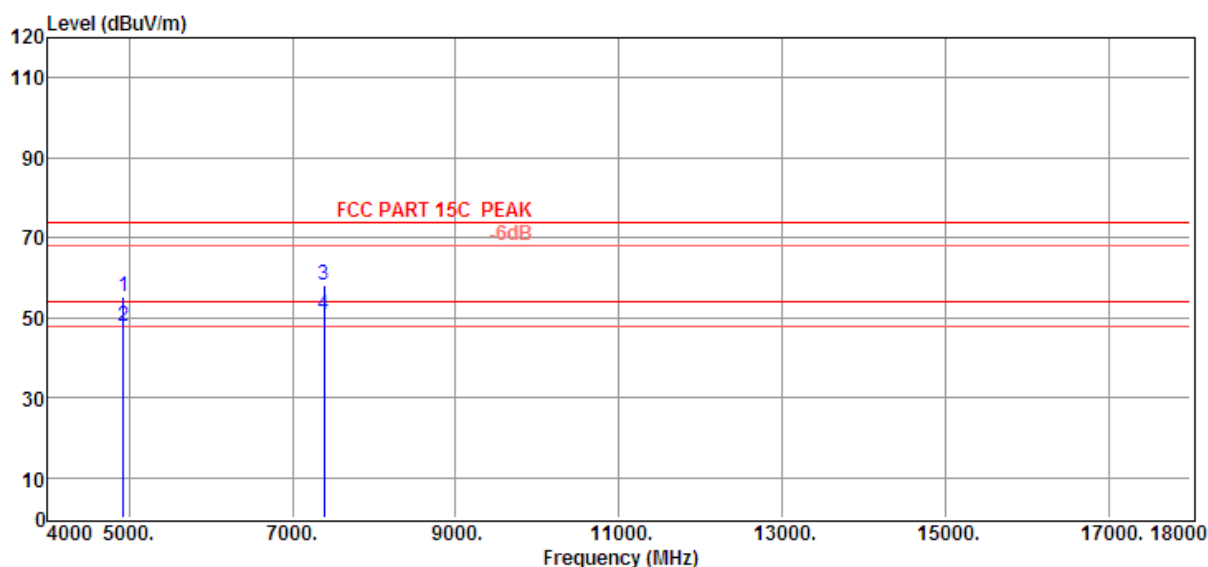
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 52



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	4924.00	55.40	34.38	44.02	9.45	55.21	74.00	-18.79	Peak	HORIZONTAL
2	4924.00	48.08	34.38	44.02	9.45	47.89	54.00	-6.11	Average	HORIZONTAL
3	7388.00	53.95	35.79	43.23	11.66	58.17	74.00	-15.83	Peak	HORIZONTAL
4	7388.00	46.63	35.79	43.23	11.66	50.85	54.00	-3.15	Average	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

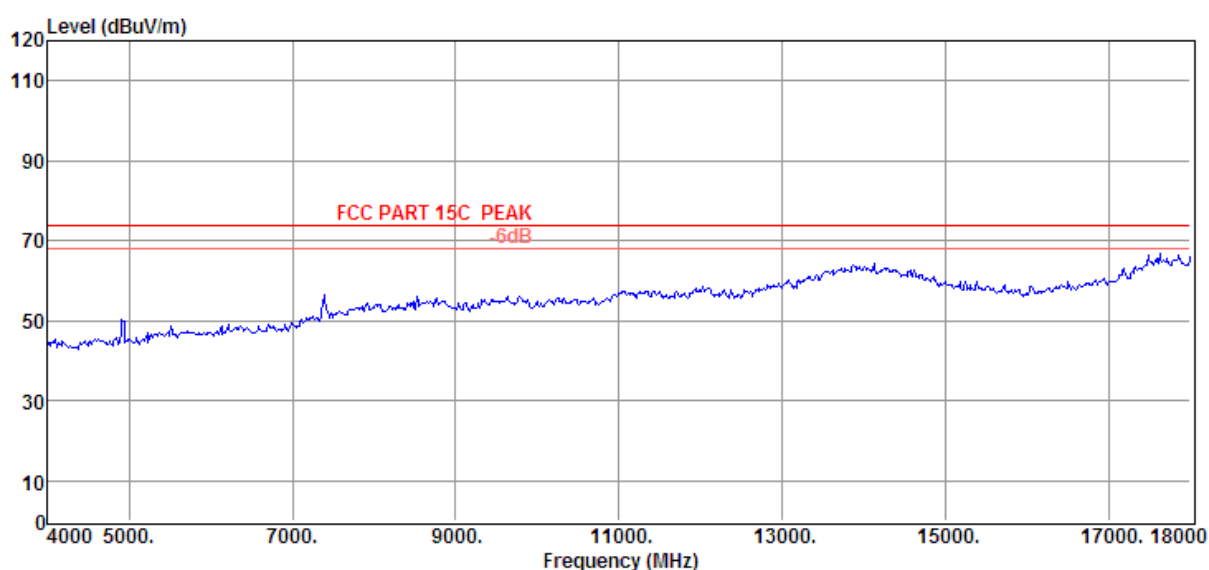
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 53



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

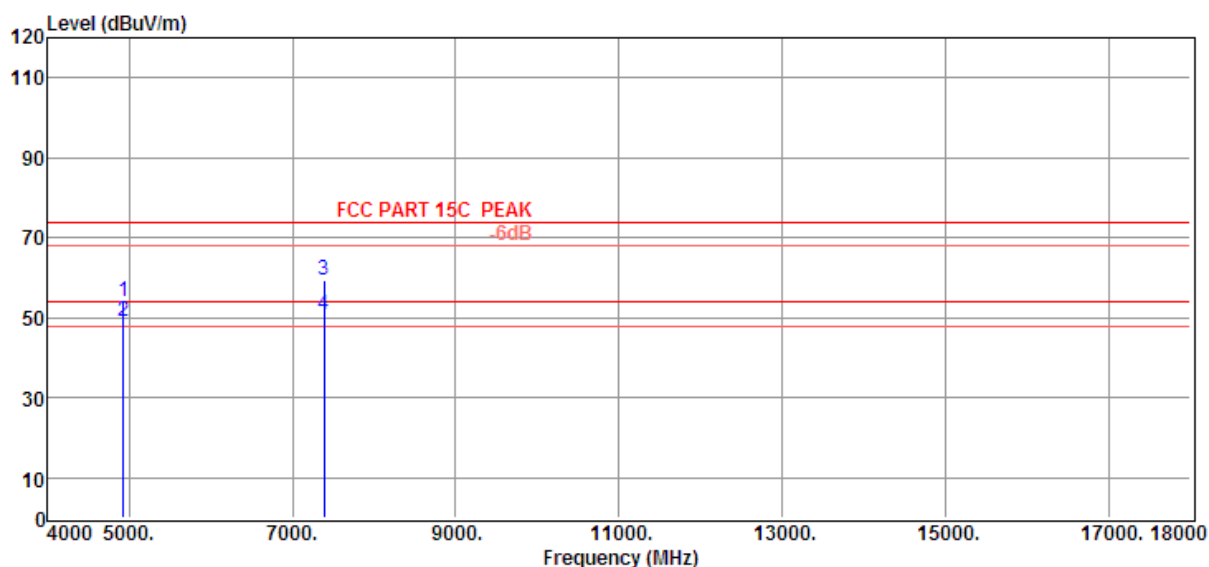
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 54



Item (Mark)	Freq (MHz)	Read Level (dBUV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBUV/m)	Limit Line (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	4924.00	42.47	34.49	35.34	12.50	54.12	74.00	-19.88	Peak	VERTICAL
2	4924.00	37.24	34.49	35.34	12.50	48.89	54.00	-5.11	Average	VERTICAL
3	7386.00	41.11	37.74	35.09	15.70	59.46	74.00	-14.54	Peak	VERTICAL
4	7386.00	32.57	37.74	35.09	15.70	50.92	54.00	-3.08	Average	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

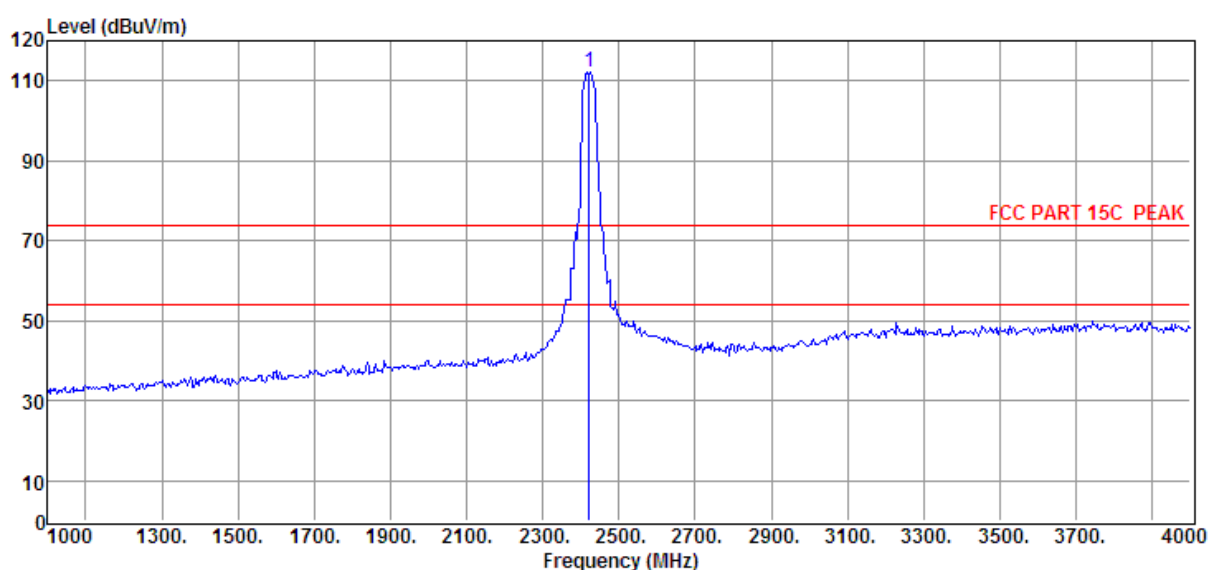
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH1 2422MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 55



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2422.00	110.15	29.46	36.01	8.77	112.37	74.00	38.37	Peak	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

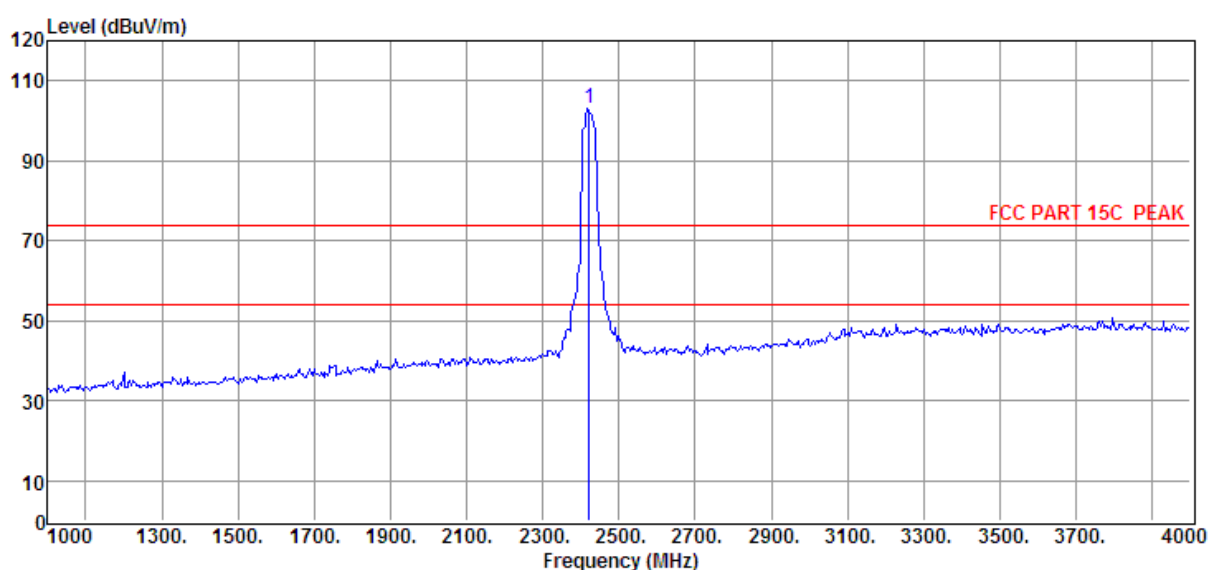
Note3: 2422MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH1 2422MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 56



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2422.00	100.85	29.46	36.01	8.77	103.07	74.00	29.07	Peak	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

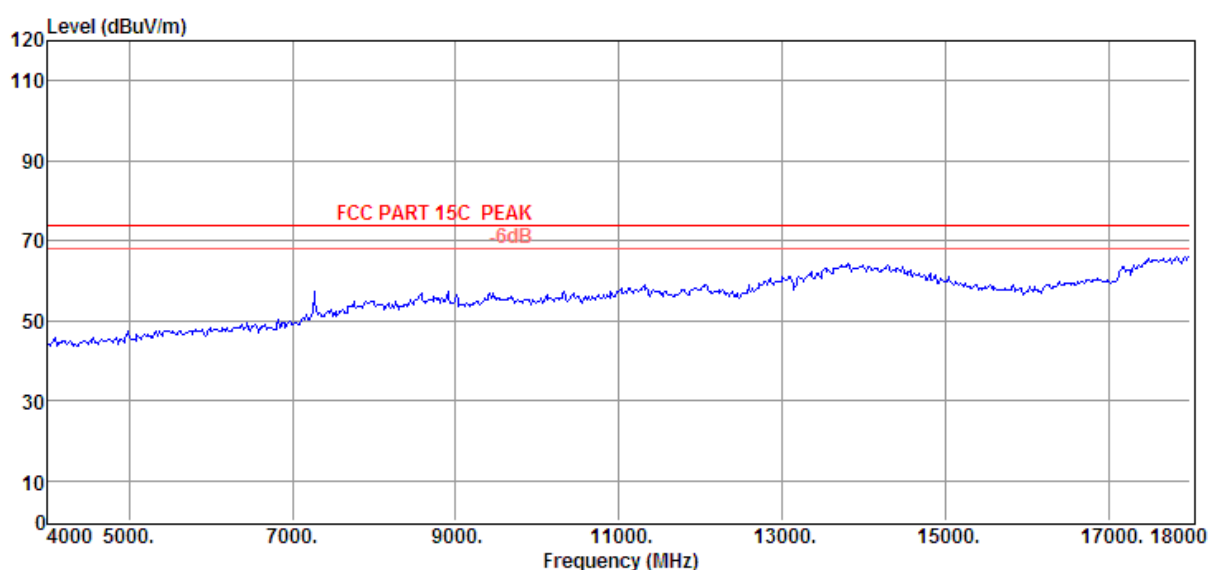
Note3: 2422MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH1 2422MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 57



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

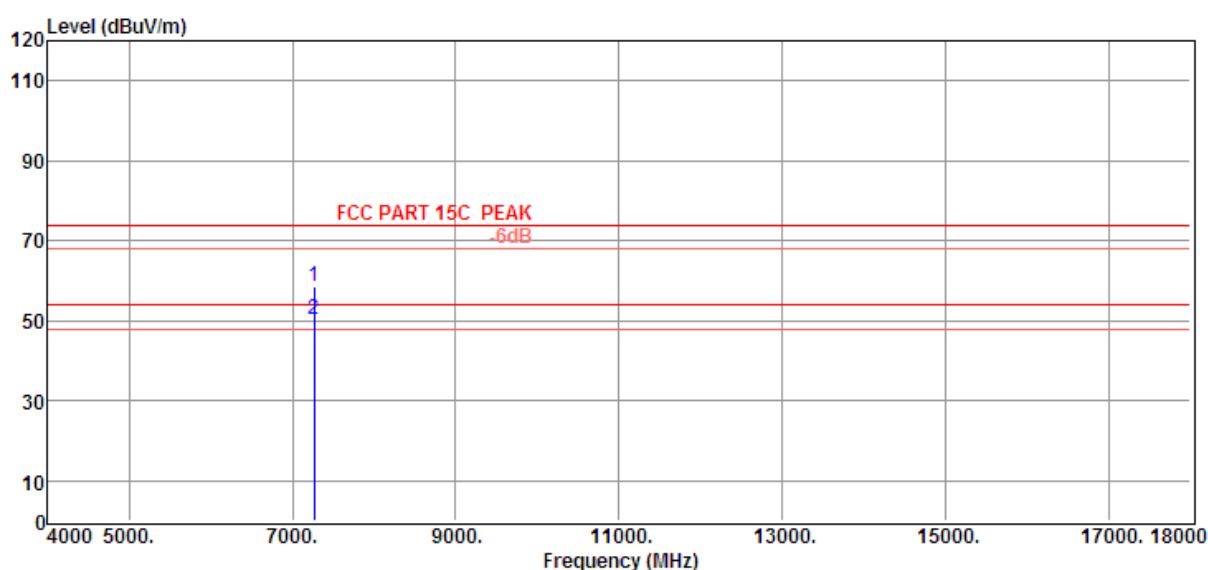
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH1 2422MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 58



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	7266.00	40.91	37.09	35.06	15.49	58.43	74.00	-15.57	Peak	VERTICAL
2	7266.00	32.62	37.09	35.06	15.49	50.14	54.00	-3.86	Average	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

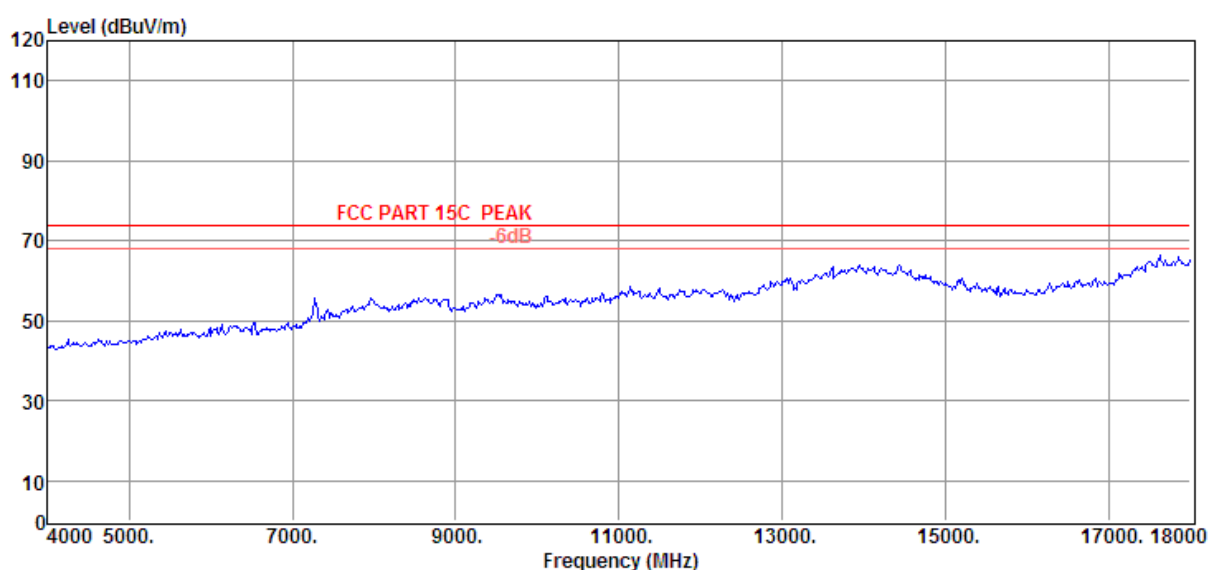
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH1 2422MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 59



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

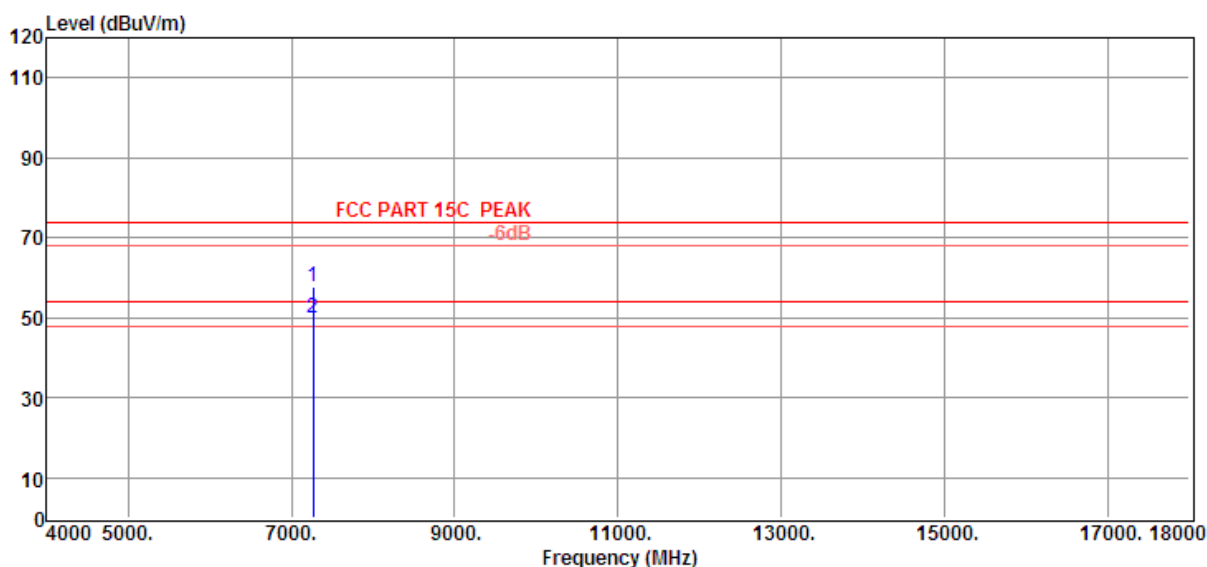
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH1 2422MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 60



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	7266.00	54.12	35.61	43.51	11.56	57.78	74.00	-16.22	Peak	HORIZONTAL
2	7266.00	46.34	35.61	43.51	11.56	50.00	54.00	-4.00	Average	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

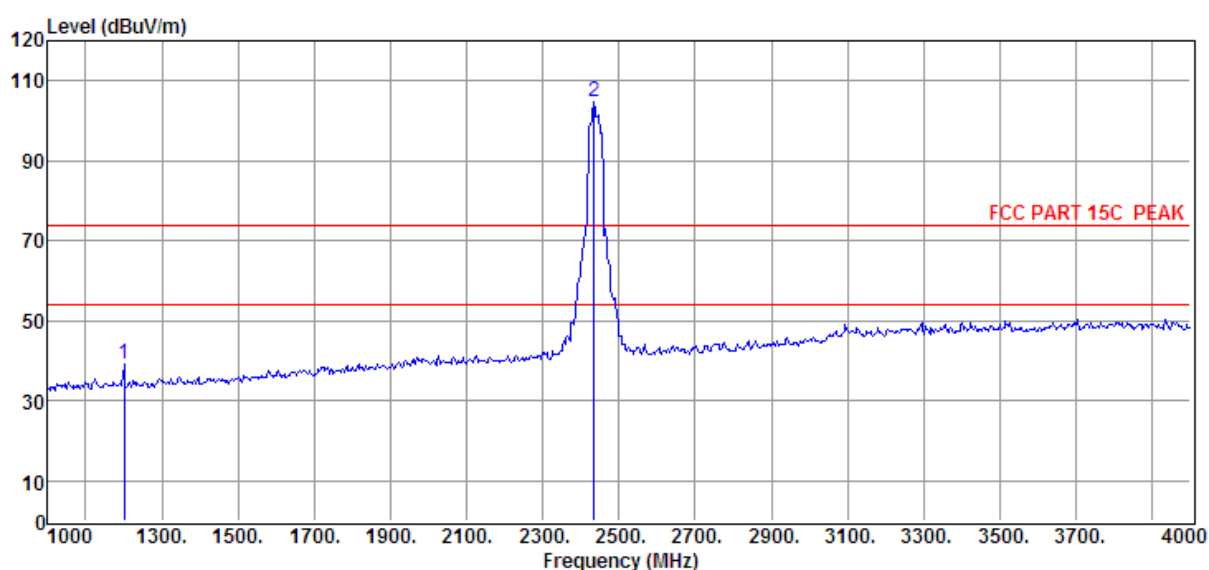
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH4 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 61



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	1201.00	53.31	24.55	43.23	4.45	39.08	74.00	-34.92	Peak	HORIZONTAL
2	2434.00	112.55	29.03	43.49	6.51	104.60	74.00	30.60	Peak	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

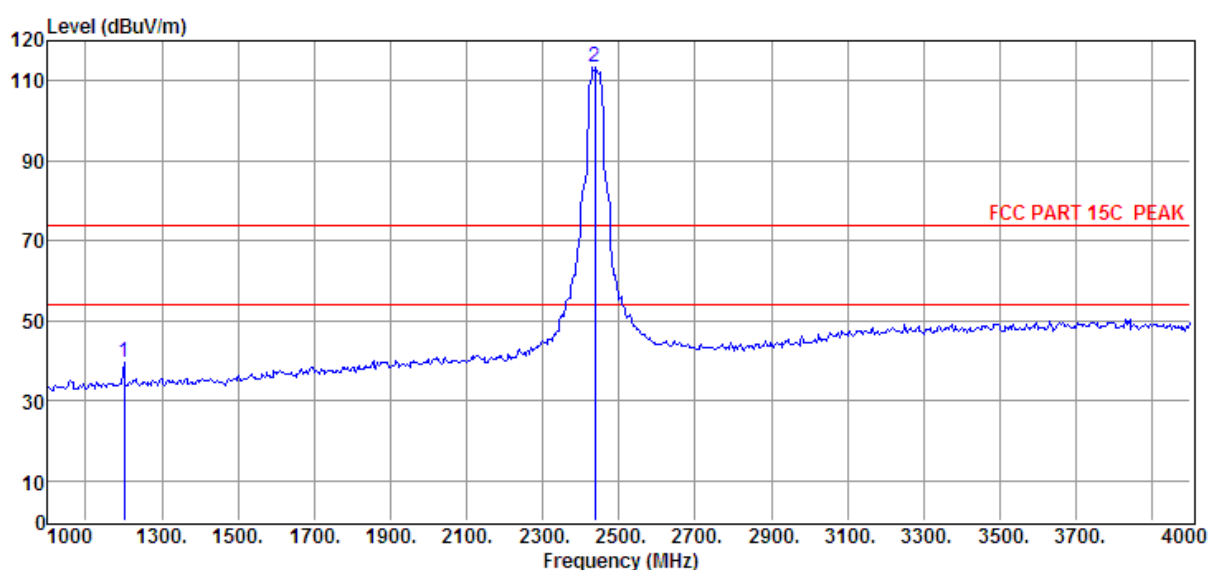
Note3: 2434MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH4 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 62



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	1201.00	53.88	24.55	43.23	4.45	39.65	74.00	-34.35	Peak	VERTICAL
2	2437.00	121.24	29.03	43.49	6.51	113.29	74.00	39.29	Peak	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

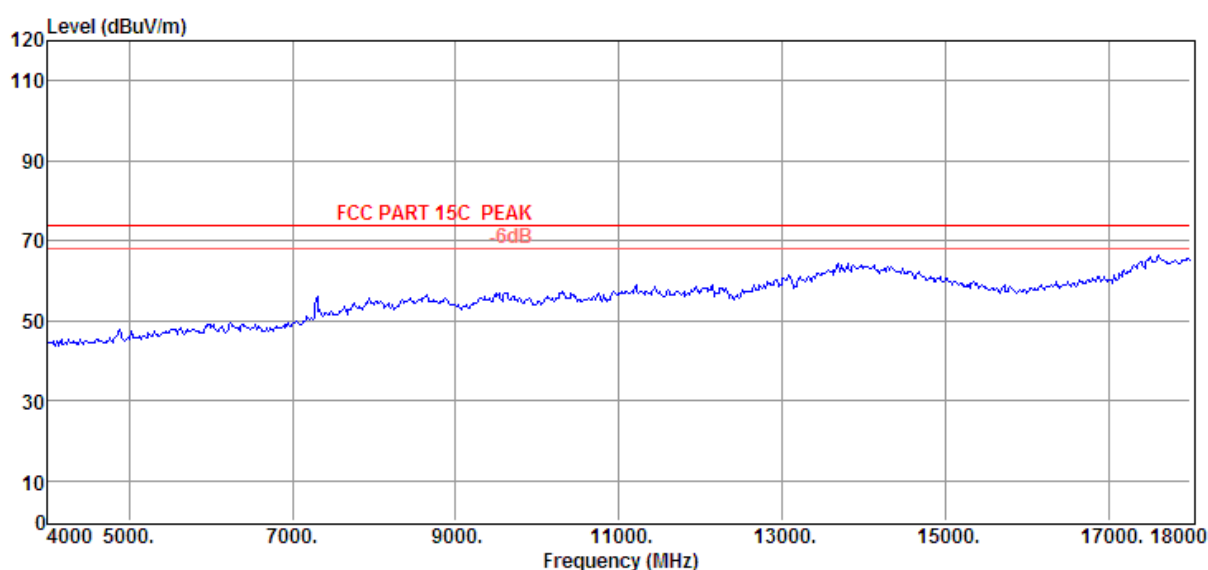
Note3: 2437MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH4 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 63



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

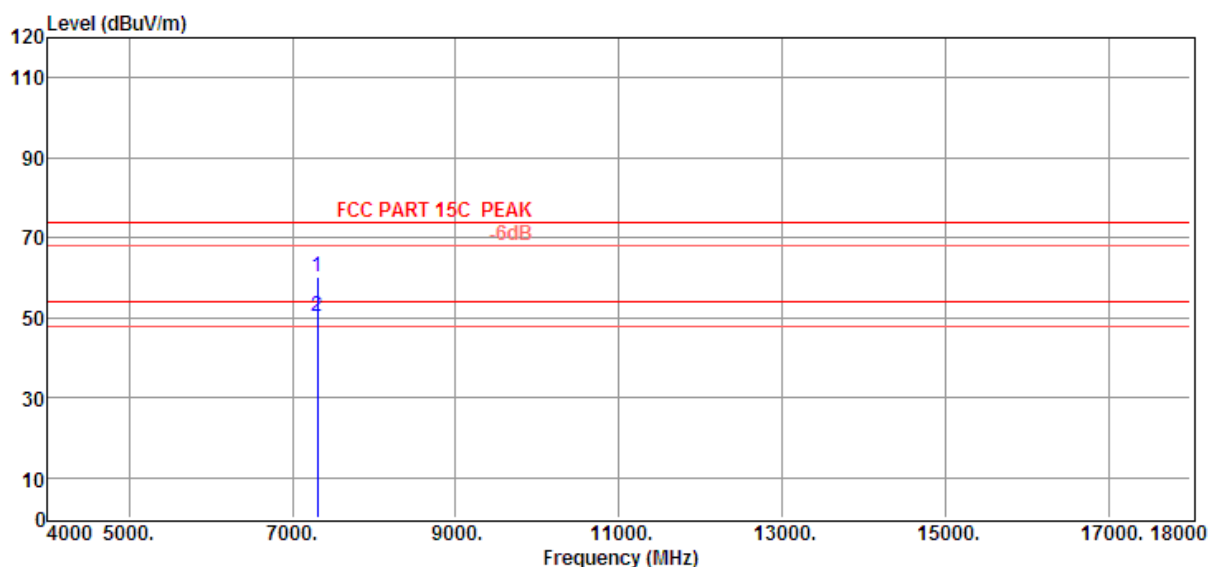
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH4 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 64



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	7311.00	42.57	37.28	35.08	15.57	60.34	74.00	-13.66	Peak	VERTICAL
2	7311.00	32.56	37.28	35.08	15.57	50.33	54.00	-3.67	Average	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

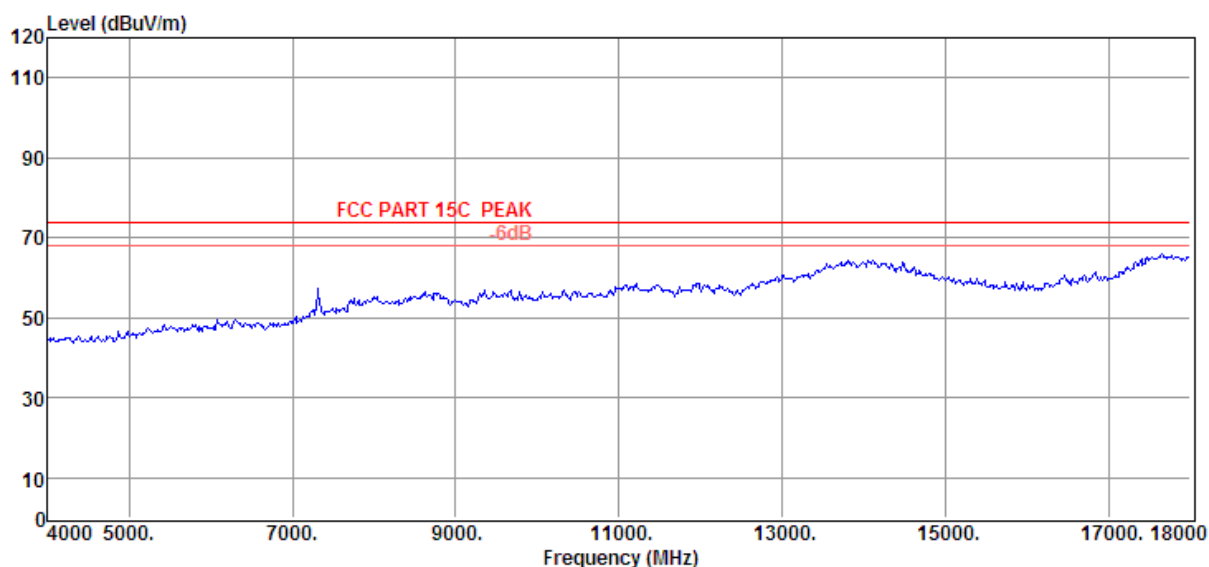
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH4 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 65



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

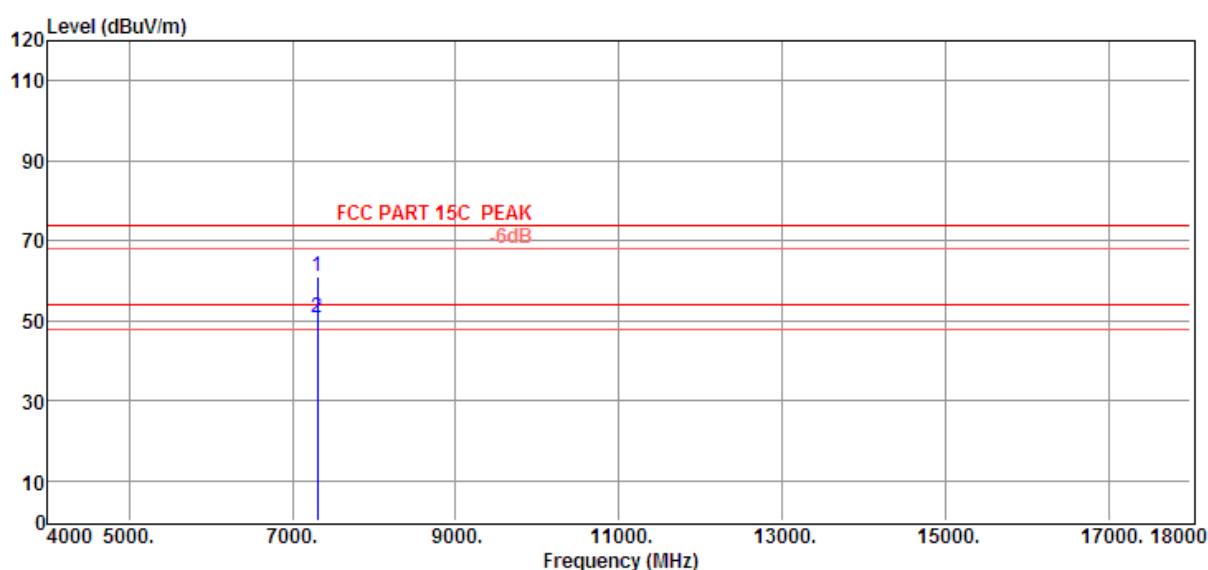
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH4 2437MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 66



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	7311.00	43.23	37.28	35.08	15.57	61.00	74.00	-13.00	Peak	HORIZONTAL
2	7311.00	32.76	37.28	35.08	15.57	50.53	54.00	-3.47	Average	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

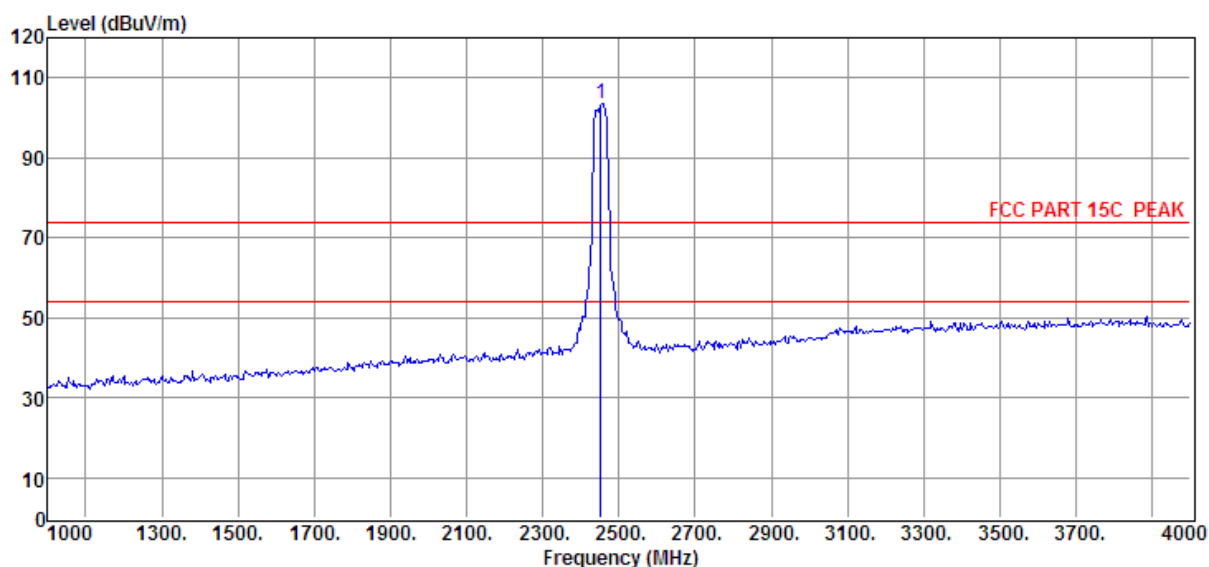
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH7 2452MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 67



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2452.00	101.30	29.47	36.06	8.82	103.53	74.00	29.53	Peak	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

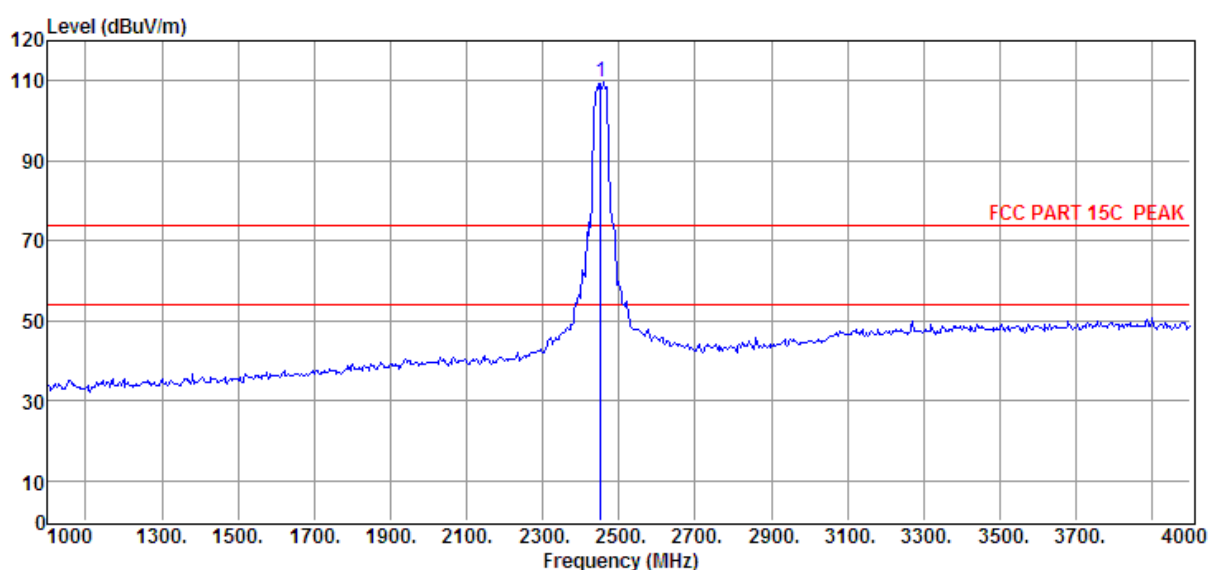
Note3: 2452MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH7 2452MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 68



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level	Factor	Factor	Loss	Level	Line	Limit		
		(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		
1	2452.00	107.40	29.47	36.06	8.82	109.63	74.00	35.63	Peak	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit

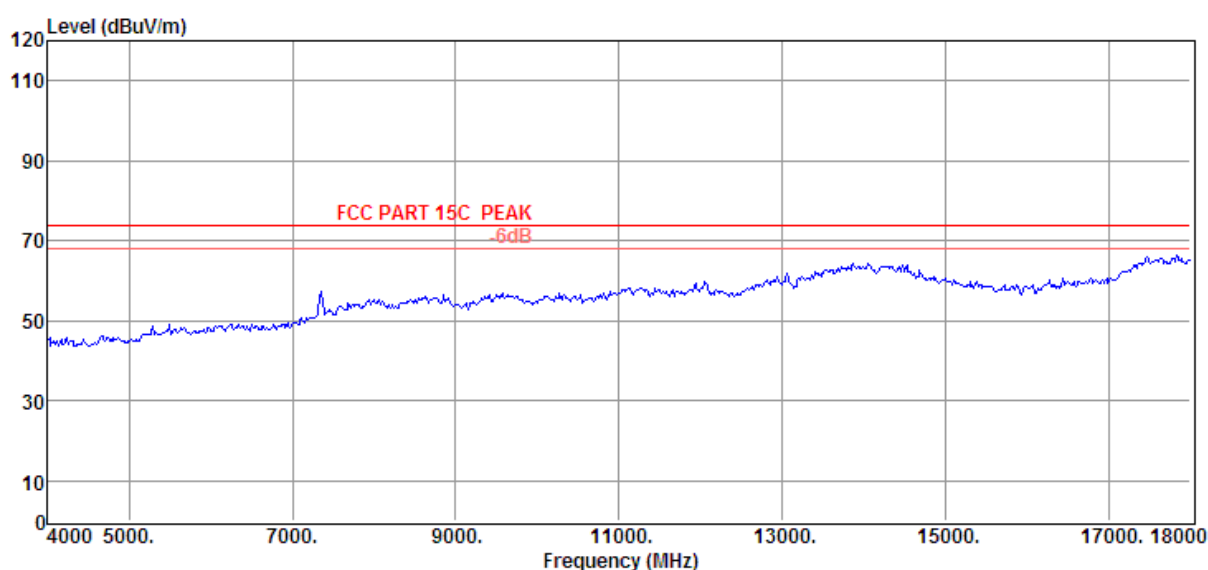
Note3: 2452MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH7 2452MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 69



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

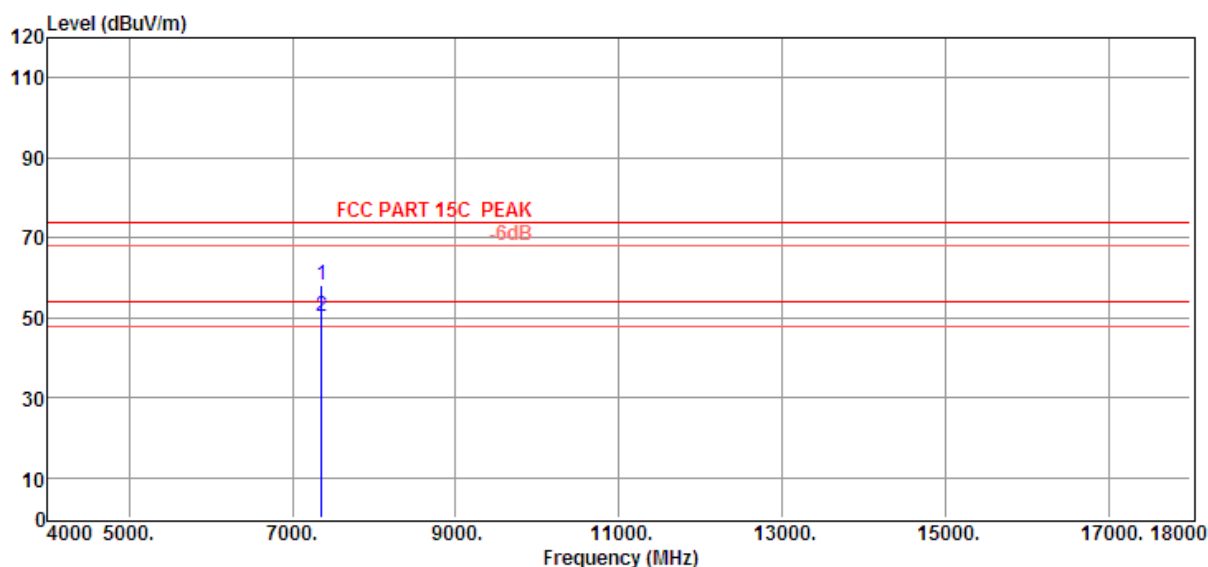
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH7 2452MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 70



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
(Mark)	(MHz)	Level (dBμV)	Factor (dB/m)	Factor dB	Loss dB	Level (dBμV/m)	Line (dBμV/m)	Limit (dB)		
1	7356.00	40.12	37.56	35.03	15.66	58.31	74.00	-15.69	Peak	HORIZONTAL
2	7356.00	32.21	37.56	35.03	15.66	50.40	54.00	-3.60	Average	HORIZONTAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

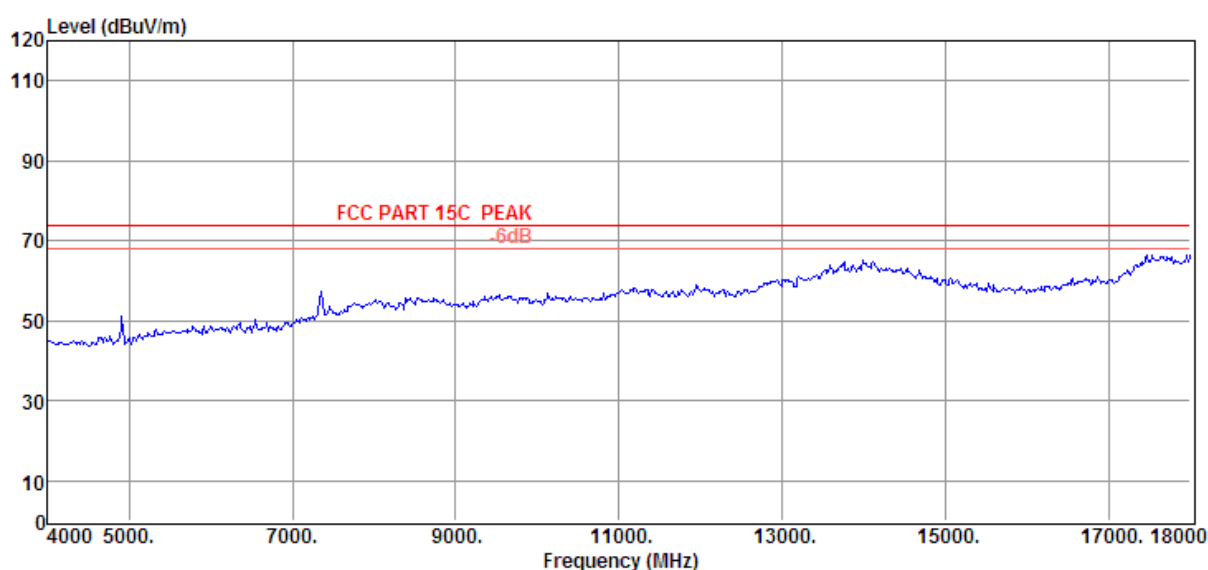
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH7 2452MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 71



Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector	Polarization
		Level	Factor	Factor	Loss	Level	Line	Limit		
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

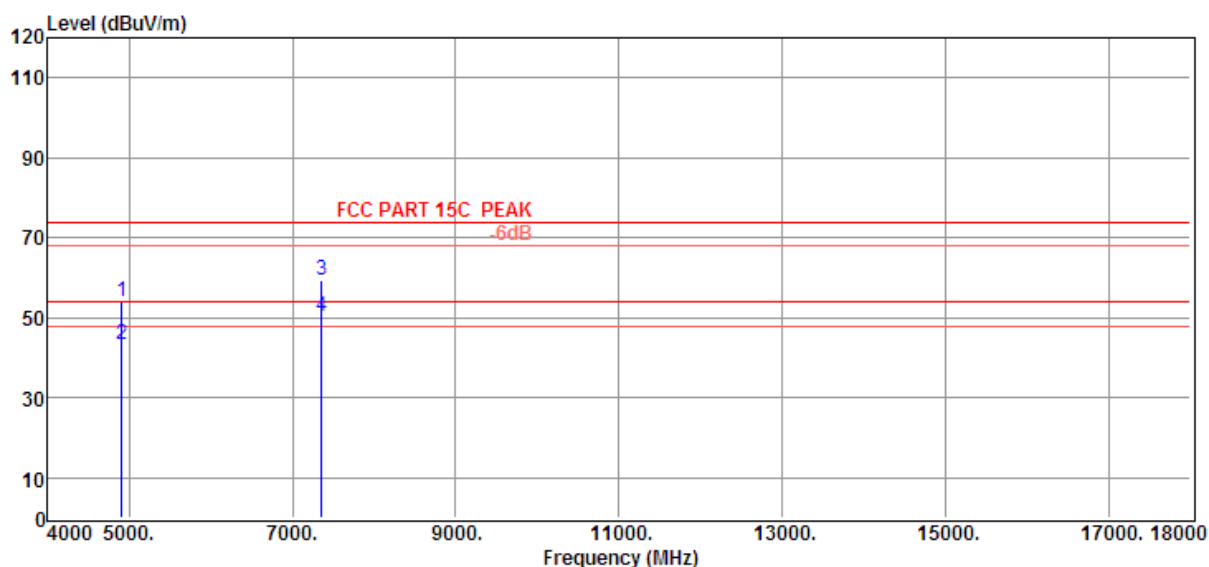
Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



Radiated Emission Test Result

Test Site : 3m Chamber **E:\2012 TEST DATA\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH7 2452MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data: 72



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	4904.00	42.40	34.46	35.27	12.47	54.06	74.00	-19.94	Peak	VERTICAL
2	4904.00	31.76	34.46	35.27	12.47	43.42	54.00	-10.58	Average	VERTICAL
3	7356.00	41.03	37.56	35.03	15.66	59.22	74.00	-14.78	Peak	VERTICAL
4	7356.00	32.11	37.56	35.03	15.66	50.30	54.00	-3.70	Average	VERTICAL

Note1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

Note2: If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit



8 BAND EDGE COMPLIANCE

8.1. TEST EQUIPMENT

Same with clause 7.1

8.2. BLOCK DIAGRAM OF TEST SETUP

Same with clause 7.2

8.3. LIMITS

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz and 5725MHz to 5850MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

8.4. TEST PROCEDURE

Same with clause 7.4 except change investigated frequency range from 2310MHz to 2415MHz and 2475MHz to 2500MHz.

8.5. TEST RESULT

PASS. (See below detailed test result)

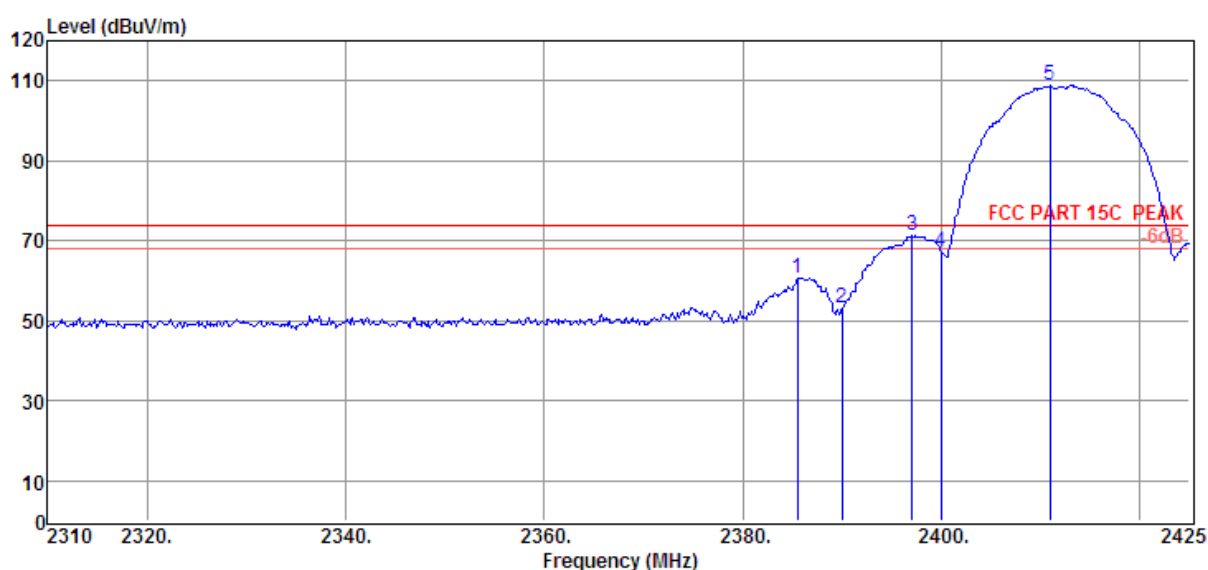
Note: For below data, the emissions located in 2390MHz to 2400MHz are exclude to comply with the 15.209 limit, and only shall be at least 20dB below the fundamental emissions



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data : 73



Item (Mark)	Freq (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2385.56	68.88	28.70	43.48	6.47	60.57	74.00	-13.43	Peak	HORIZONTAL
2	2390.00	61.32	28.70	43.48	6.47	53.01	74.00	-20.99	Peak	HORIZONTAL
3	2397.06	79.29	28.93	43.48	6.47	71.21	/	/	Peak	HORIZONTAL
4	2400.00	75.21	28.93	43.49	6.47	67.12	/	/	Peak	HORIZONTAL
5	2410.97	116.82	28.98	43.49	6.49	108.80	74.00	34.80	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

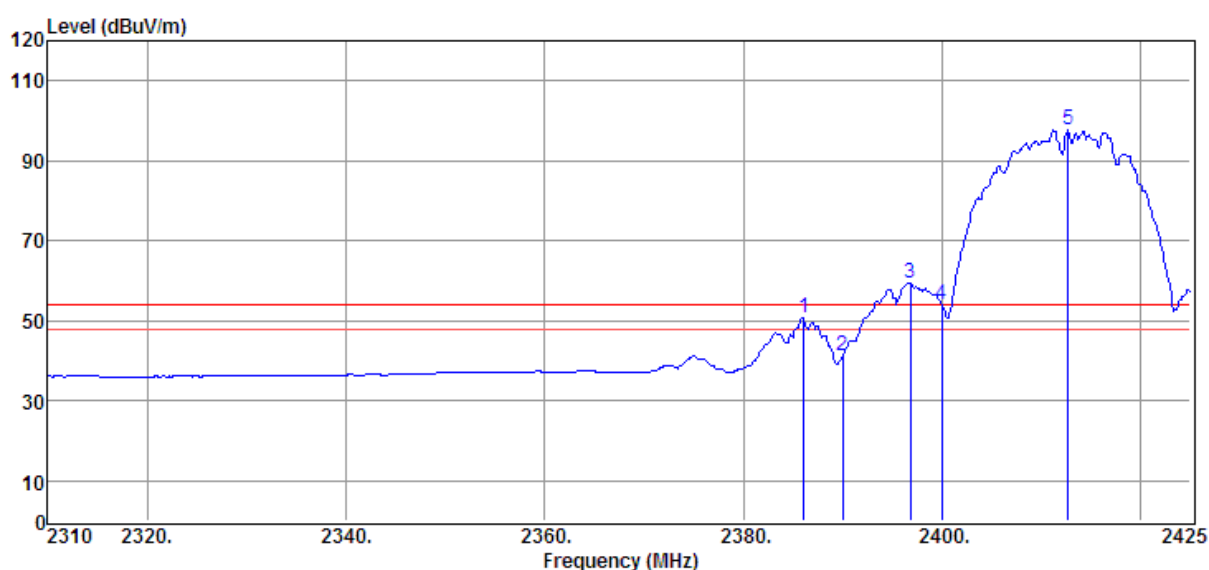
3. 2410MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data: 74



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2386.13	58.93	28.70	43.48	6.47	50.62	54.00	-3.38	Average	HORIZONTAL
2	2390.00	49.57	28.70	43.48	6.47	41.26	54.00	-12.74	Average	HORIZONTAL
3	2396.83	67.30	28.93	43.48	6.47	59.22	/	/	Average	HORIZONTAL
4	2400.00	62.24	28.93	43.49	6.47	54.15	/	/	Average	HORIZONTAL
5	2412.70	105.83	28.98	43.49	6.49	97.81	54.00	43.81	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

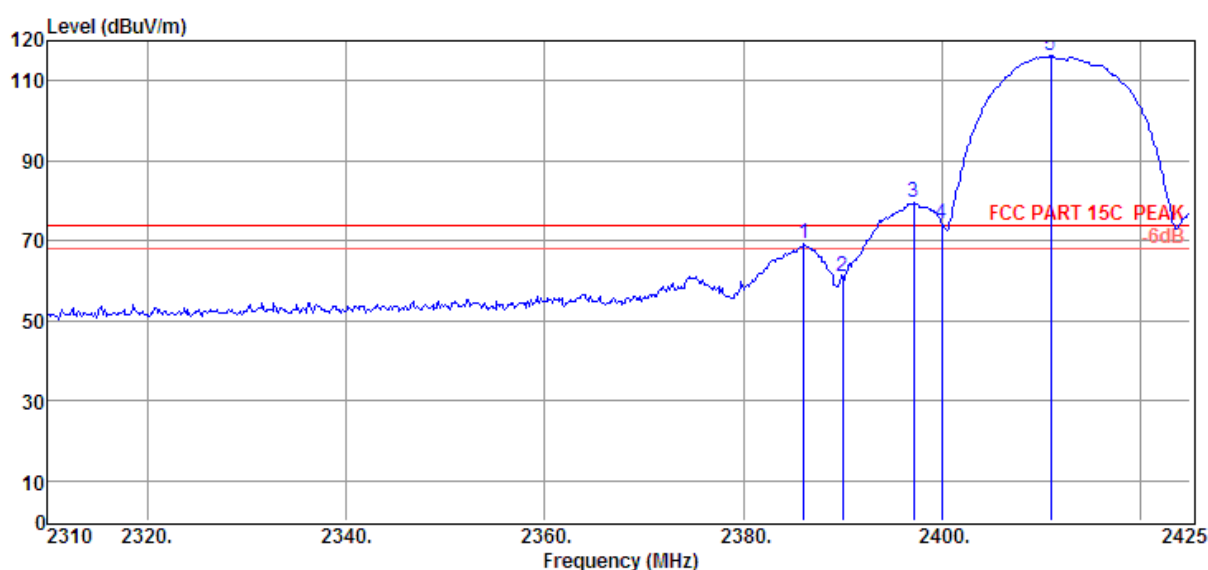
3. 2412MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data : 75



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2386.13	77.51	28.70	43.48	6.47	69.20	74.00	-4.80	Peak	VERTICAL
2	2390.00	69.21	28.70	43.48	6.47	60.90	74.00	-13.10	Peak	VERTICAL
3	2397.17	87.51	28.93	43.48	6.47	79.43	/	/	Peak	VERTICAL
4	2400.00	82.23	28.93	43.49	6.47	74.14	/	/	Peak	VERTICAL
5	2410.97	124.24	28.98	43.49	6.49	116.22	74.00	42.22	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. 2410.97MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber

E:\2012 Test Data\D\12Q0056

Test Date : 2012-04-19

Tested By : TaTa Chen

EUT : ALVO Smartpad

Model Number : ALVO SmartPAD 2

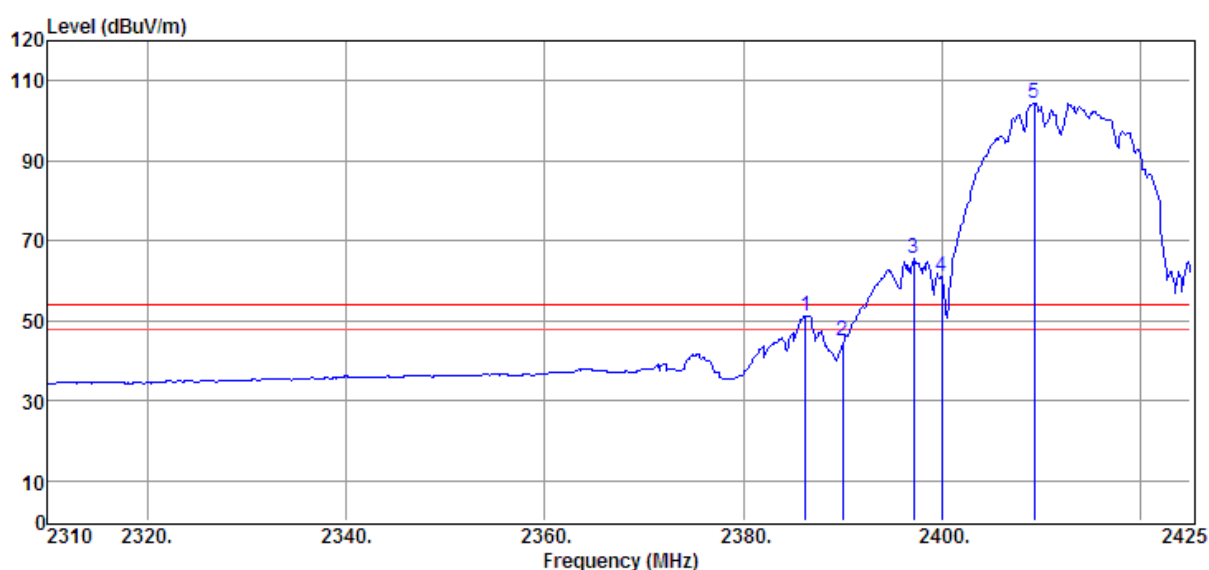
Power Supply : DC 5V from Adapter

Test Mode : IEEE802.11b CH1 2412MHz Tx

Condition : 23°C/54%

Antenna/Distance : 3115(0911)/3m/VERTICAL

Data : 76



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2386.25	59.43	28.70	43.48	6.47	51.12	54.00	-2.88	Average	VERTICAL
2	2390.00	53.45	28.70	43.48	6.47	45.14	54.00	-8.86	Average	VERTICAL
3	2397.17	73.46	28.93	43.48	6.47	65.38	/	/	Average	VERTICAL
4	2400.00	69.29	28.93	43.49	6.47	61.20	/	/	Average	VERTICAL
5	2409.25	112.45	28.98	43.49	6.49	104.43	54.00	50.43	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. 2409.25MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber

E:\2012 Test Data\D\12Q0056

Test Date : 2012-04-19

Tested By : TaTa Chen

EUT : ALVO Smartpad

Model Number : ALVO SmartPAD 2

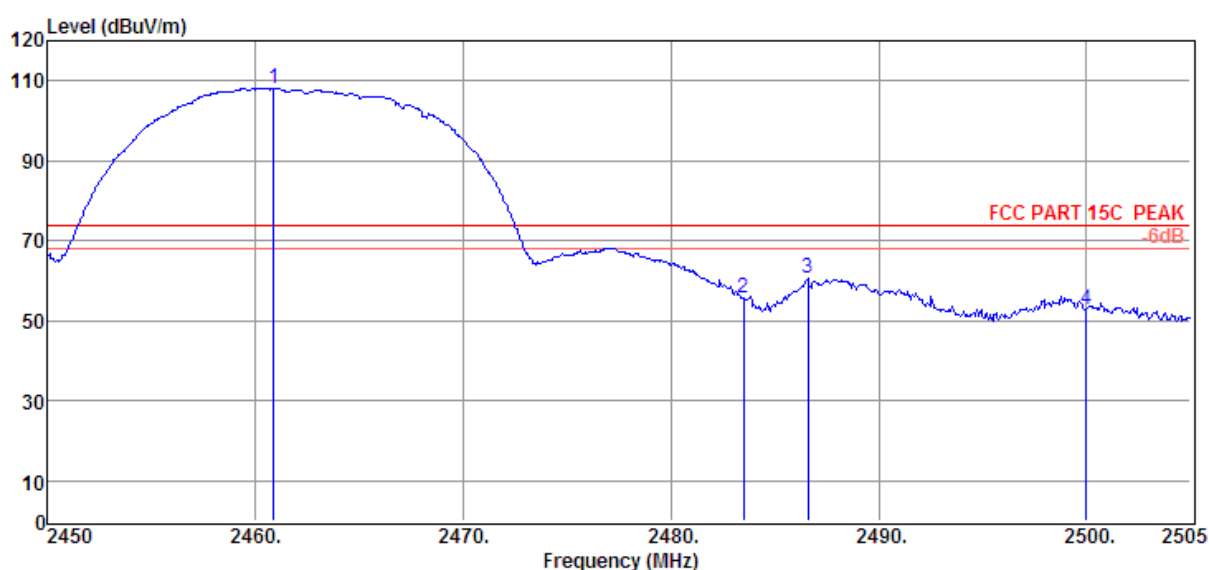
Power Supply : DC 5V from Adapter

Test Mode : IEEE802.11b CH11 2462MHz Tx

Condition : 23°C/54%

Antenna/Distance : 3115(0911)/3m/HORIZONTAL

Data : 77



Item (Mark)	Freq (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2460.89	116.03	29.13	43.49	6.55	108.22	74.00	34.22	Peak	HORIZONTAL
2	2483.50	63.44	29.18	43.50	6.57	55.69	74.00	-18.31	Peak	HORIZONTAL
3	2486.58	68.22	29.18	43.50	6.57	60.47	74.00	-13.53	Peak	HORIZONTAL
4	2500.00	60.61	29.25	43.50	6.59	52.95	74.00	-21.05	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

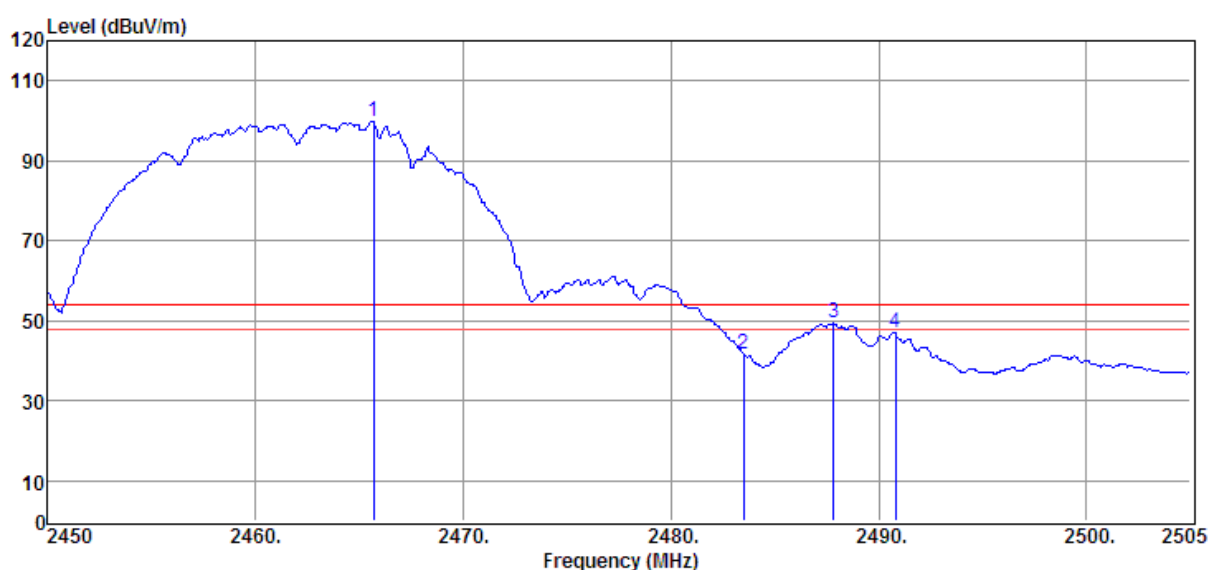
3. 2460.9MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data : 78



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2465.68	107.68	29.13	43.49	6.55	99.87	54.00	45.87	Average	HORIZONTAL
2	2483.50	49.49	29.18	43.50	6.57	41.74	54.00	-12.26	Average	HORIZONTAL
3	2487.84	57.06	29.18	43.50	6.57	49.31	54.00	-4.69	Average	HORIZONTAL
4	2490.81	54.74	29.18	43.50	6.57	46.99	54.00	-7.01	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit
3. 2465.68MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber

E:\2012 Test Data\D\12Q0056

Test Date : 2012-04-19

Tested By : TaTa Chen

EUT : ALVO Smartpad

Model Number : ALVO SmartPAD 2

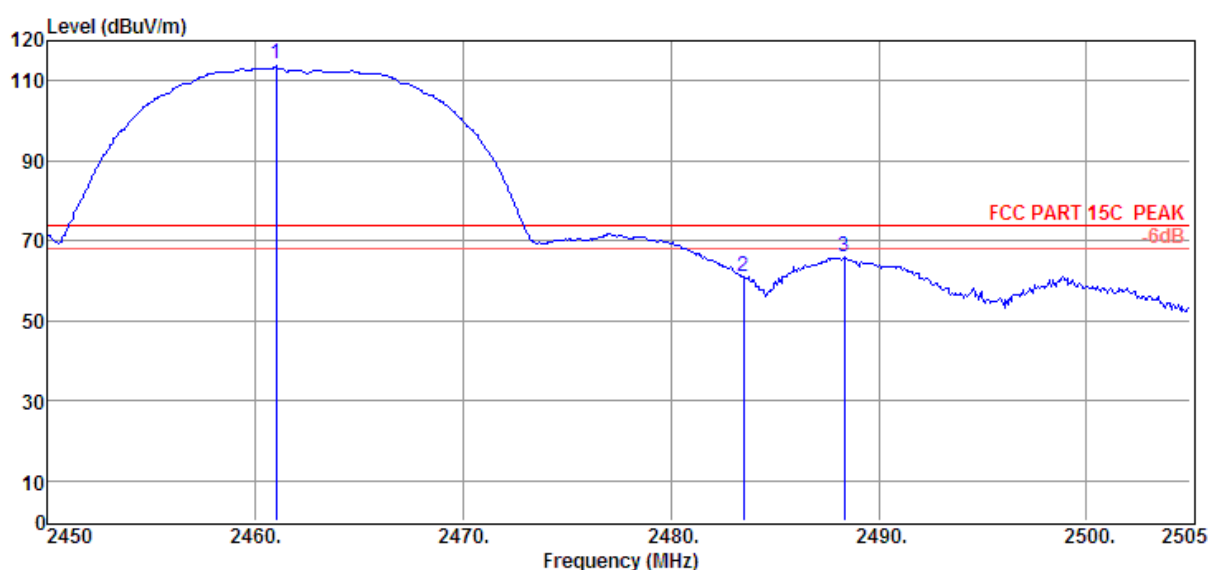
Power Supply : DC 5V from Adapter

Test Mode : IEEE802.11b CH11 2462MHz Tx

Condition : 23°C/54%

Antenna/Distance : 3115(0911)/3m/VERTICAL

Data : 79



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2461.00	122.05	29.13	43.49	6.55	114.24	74.00	40.24	Peak	HORIZONTAL
2	2483.50	68.61	29.18	43.50	6.57	60.86	74.00	-13.14	Peak	HORIZONTAL
3	2488.34	73.66	29.18	43.50	6.57	65.91	74.00	-8.09	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

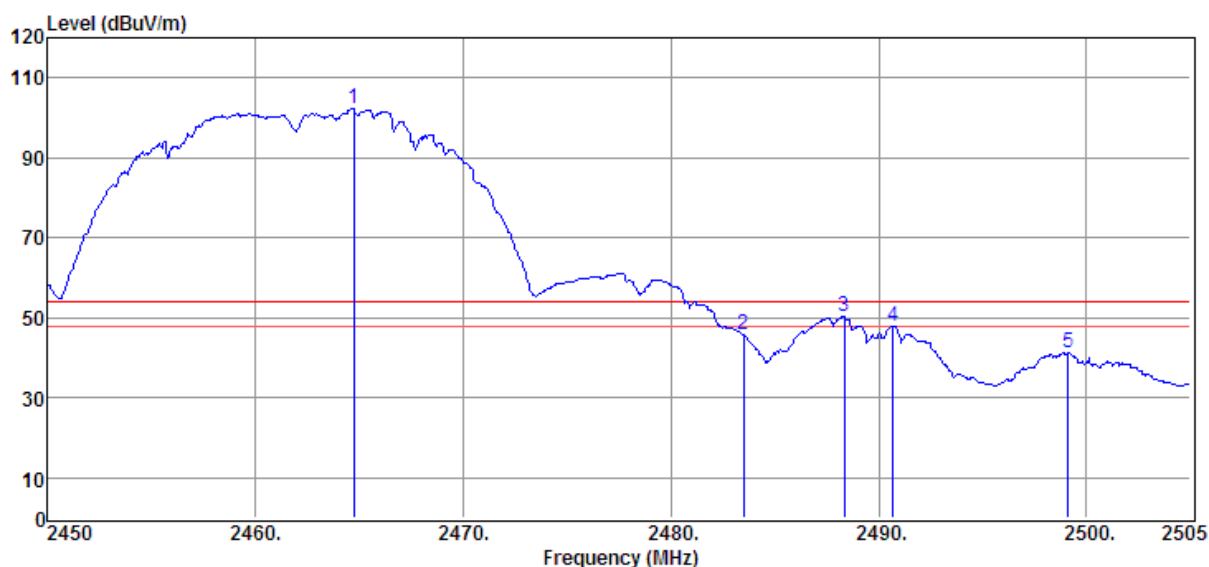
3. 2461.0MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11b CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data : 80



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2464.74	110.21	29.13	43.49	6.55	102.40	54.00	48.40	Average	HORIZONTAL
2	2483.50	53.38	29.18	43.50	6.57	45.63	54.00	-8.37	Average	HORIZONTAL
3	2488.34	57.95	29.18	43.50	6.57	50.20	54.00	-3.80	Average	HORIZONTAL
4	2490.70	55.68	29.18	43.50	6.57	47.93	54.00	-6.07	Average	HORIZONTAL
5	2499.12	48.93	29.25	43.50	6.59	41.27	54.00	-12.73	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

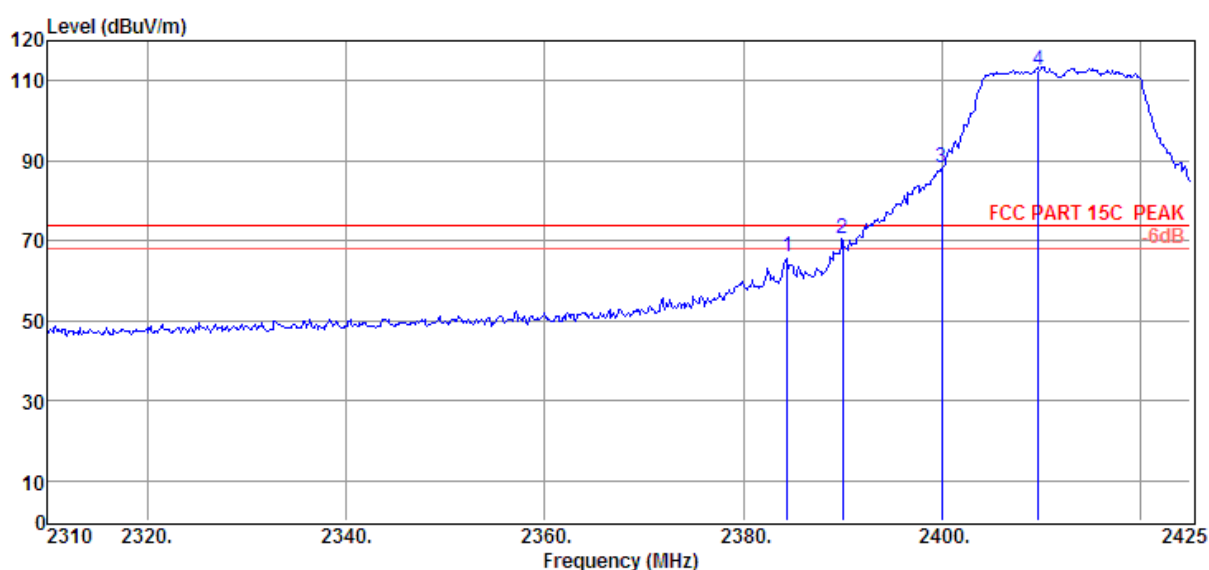
3. 2464.74MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data : 81



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2384.41	74.46	28.70	43.48	6.45	66.13	74.00	-7.87	Peak	VERTICAL
2	2390.00	78.69	28.70	43.48	6.47	70.38	74.00	-3.62	Peak	VERTICAL
3	2400.00	96.51	28.93	43.49	6.47	88.42	/	/	Peak	VERTICAL
4	2409.71	120.55	28.98	43.49	6.49	112.53	74.00	38.53	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

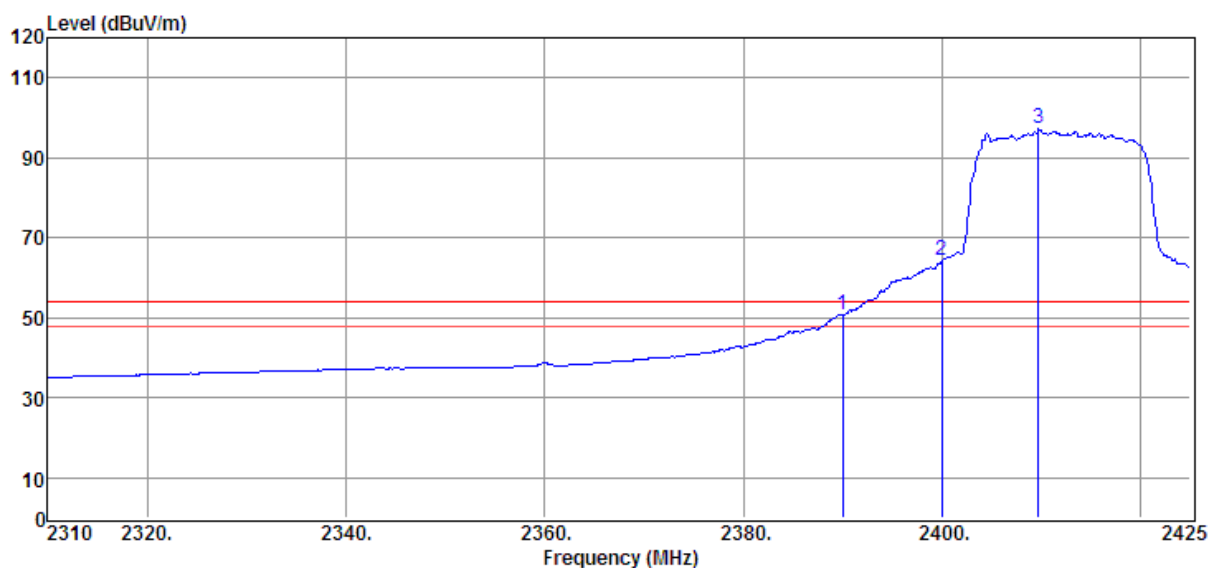
3. 2409.71MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data : 82



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2390.00	58.95	28.70	43.48	6.47	50.64	54.00	-3.36	Average	VERTICAL
2	2400.00	72.44	28.93	43.49	6.47	64.35	/	/	Average	VERTICAL
3	2409.71	105.15	28.98	43.49	6.49	97.13	54.00	43.13	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

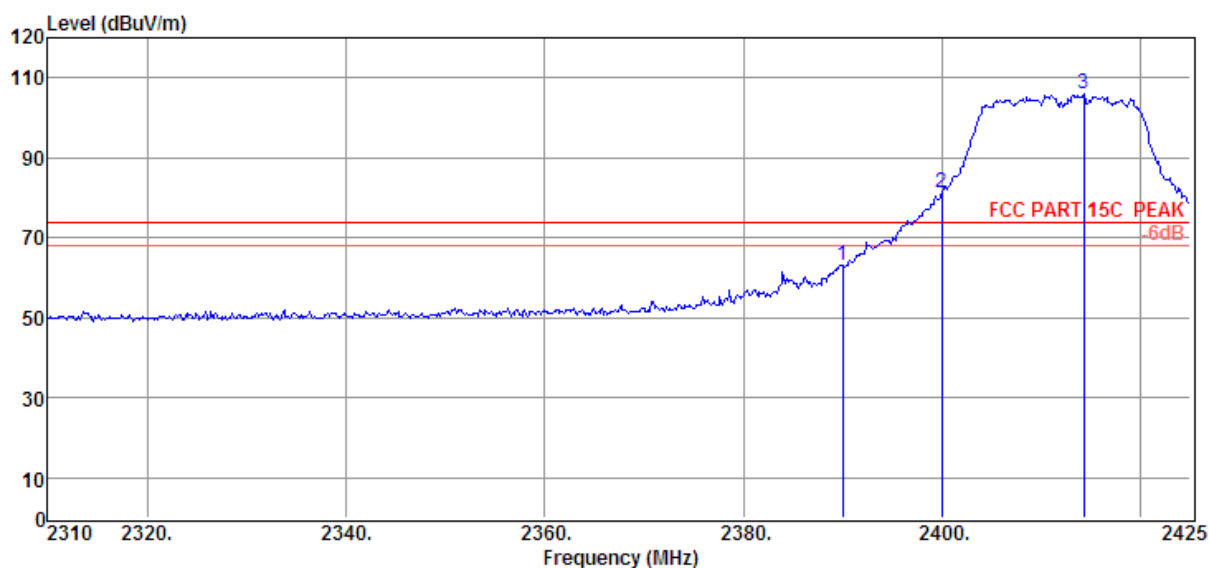
3. 2409.71MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data : 83



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2390.00	71.27	28.70	43.48	6.47	62.96	74.00	-11.04	Peak	HORIZONTAL
2	2400.00	89.12	28.93	43.49	6.47	81.03	/	/	Peak	HORIZONTAL
3	2414.31	113.88	28.98	43.49	6.49	105.86	74.00	31.86	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

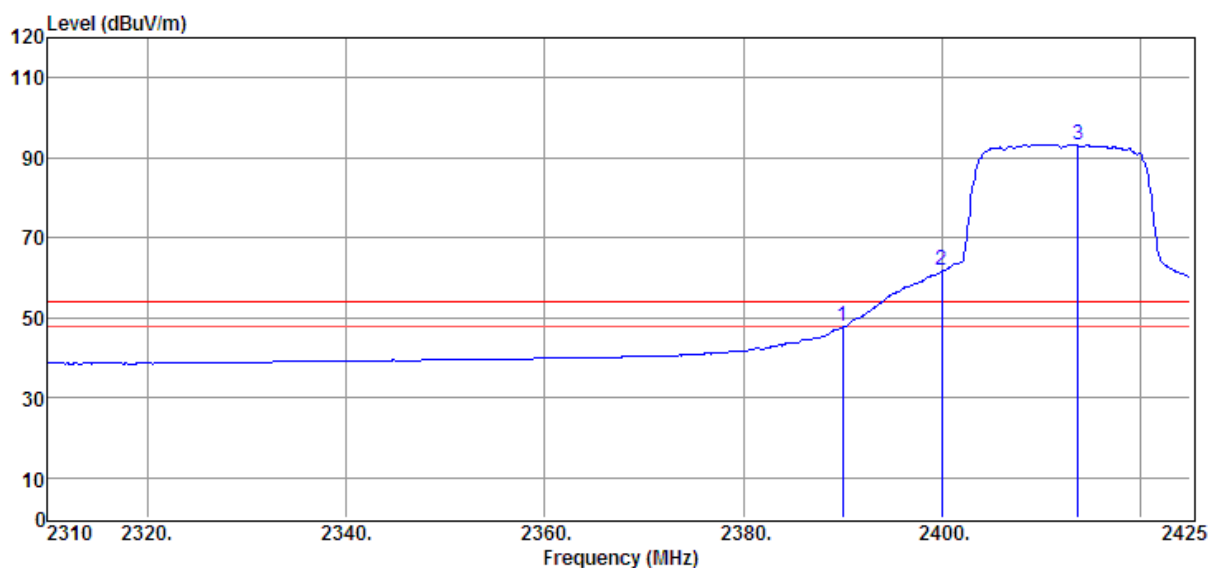
3. 2414.31MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH1 2412MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data : 84



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2390.00	56.05	28.70	43.48	6.47	47.74	54.00	-6.26	Average	HORIZONTAL
2	2400.00	69.90	28.93	43.49	6.47	61.81	/	/	Average	HORIZONTAL
3	2413.73	101.39	28.98	43.49	6.49	93.37	54.00	39.37	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

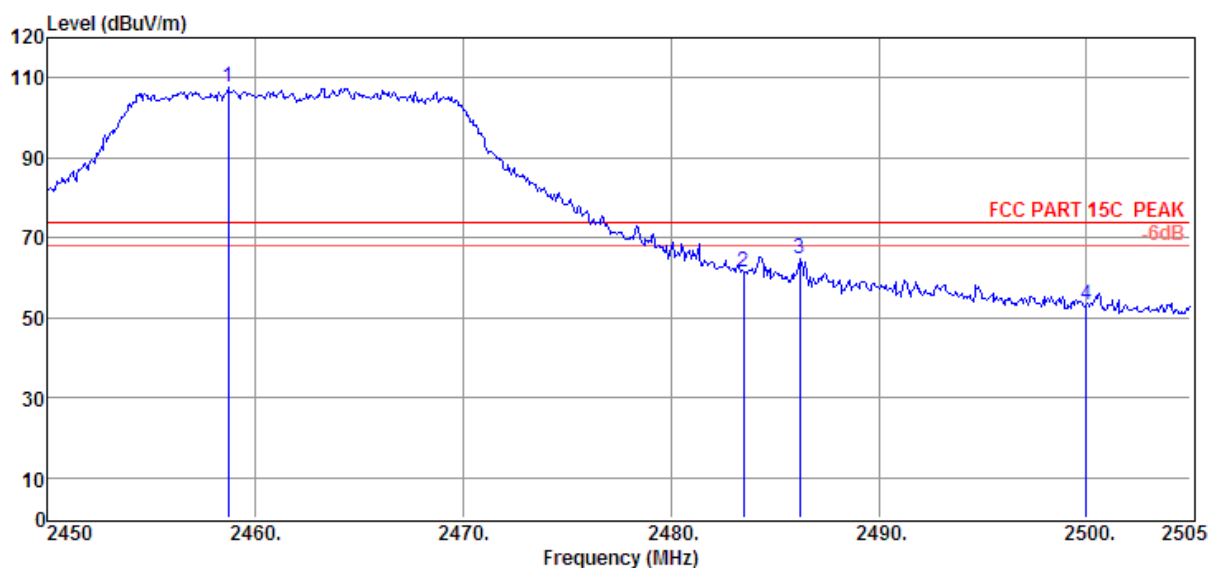
3. 2413.73MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data : 85



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2458.69	115.61	29.08	43.49	6.55	107.75	74.00	33.75	Peak	HORIZONTAL
2	2483.50	69.34	29.18	43.50	6.57	61.59	74.00	-12.41	Peak	HORIZONTAL
3	2486.19	72.43	29.18	43.50	6.57	64.68	74.00	-9.32	Peak	HORIZONTAL
4	2500.00	61.02	29.25	43.50	6.59	53.36	74.00	-20.64	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

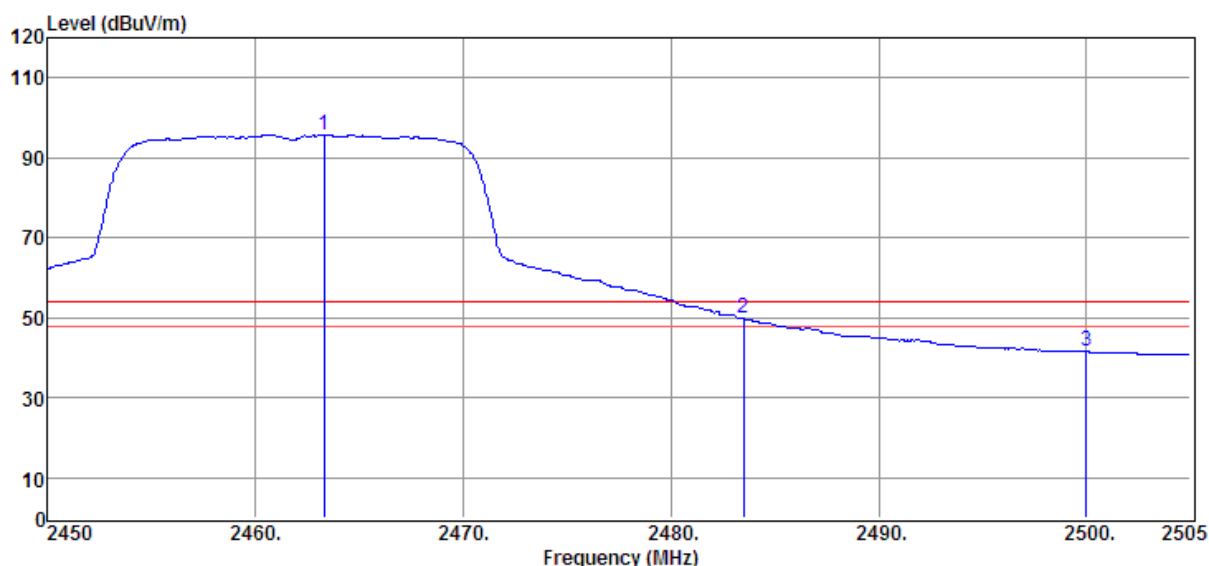
3. 2458.69MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data : 86



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2463.31	103.53	29.13	43.49	6.55	95.72	54.00	41.72	Average	HORIZONTAL
2	2483.50	57.56	29.18	43.50	6.57	49.81	54.00	-4.19	Average	HORIZONTAL
3	2500.00	49.16	29.25	43.50	6.59	41.50	54.00	-12.50	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

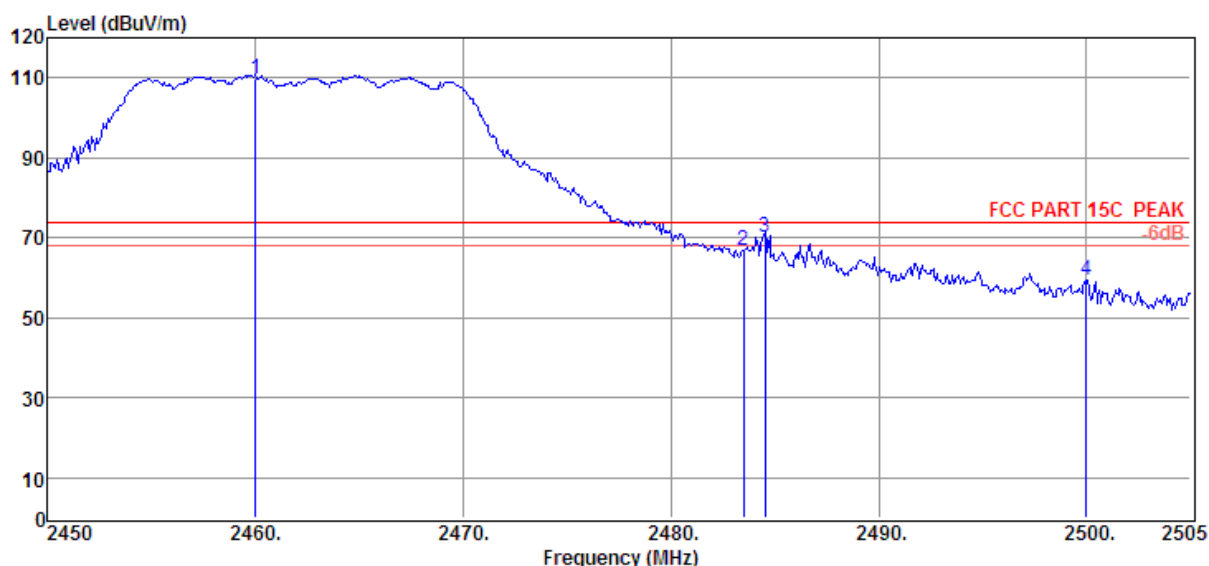
3. 2463.31MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data : 87



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2460.01	117.58	29.13	43.49	6.55	109.77	74.00	35.77	Peak	VERTICAL
2	2483.50	74.58	29.18	43.50	6.57	66.83	74.00	-7.17	Peak	VERTICAL
3	2484.54	77.93	29.18	43.50	6.57	70.18	74.00	-3.82	Peak	VERTICAL
4	2500.00	66.99	29.25	43.50	6.59	59.33	74.00	-14.67	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

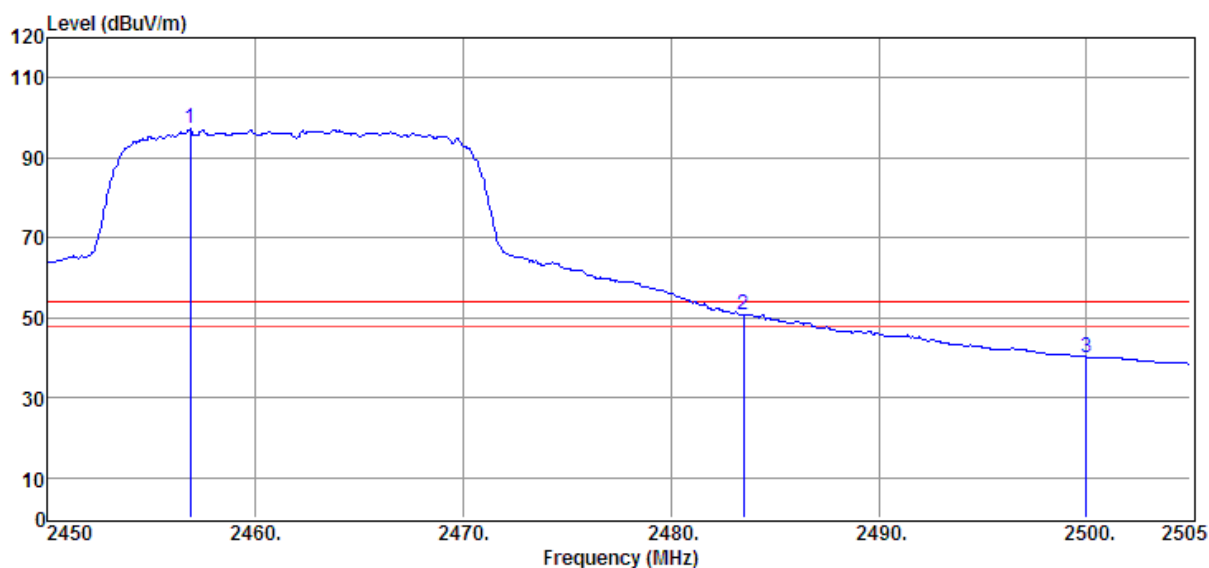
3. 2460.01MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11g CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data : 88



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2456.88	105.05	29.08	43.49	6.53	97.17	54.00	43.17	Average	VERTICAL
2	2483.50	58.49	29.18	43.50	6.57	50.74	54.00	-3.26	Average	VERTICAL
3	2500.00	47.83	29.25	43.50	6.59	40.17	54.00	-13.83	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. 2456.88MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber

E:\2012 Test Data\D\12Q0056

Test Date : 2012-04-19

Tested By : TaTa Chen

EUT : ALVO Smartpad

Model Number : ALVO SmartPAD 2

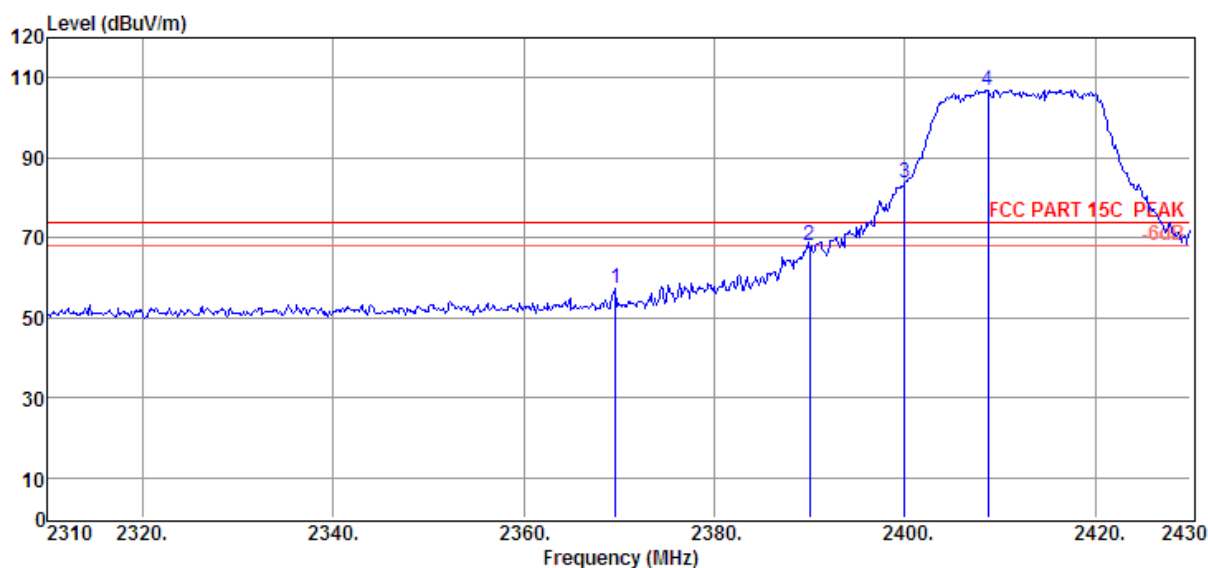
Power Supply : DC 5V from Adapter

Test Mode : IEEE802.11n HT20 CH1 2412MHz Tx

Condition : 23°C/54%

Antenna/Distance : 3115(0911)/3m/HORIZONTAL

Data : 89



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2369.64	65.98	28.48	43.48	6.45	57.43	74.00	-16.57	Peak	HORIZONTAL
2	2390.00	76.17	28.70	43.48	6.47	67.86	74.00	-6.14	Peak	HORIZONTAL
3	2400.00	91.92	28.93	43.49	6.47	83.83	/	/	Peak	HORIZONTAL
4	2408.76	115.02	28.98	43.49	6.49	107.00	74.00	33.00	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. 2408.76MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber

E:\2012 Test Data\D\12Q0056

Test Date : 2012-04-19

Tested By : TaTa Chen

EUT : ALVO Smartpad

Model Number : ALVO SmartPAD 2

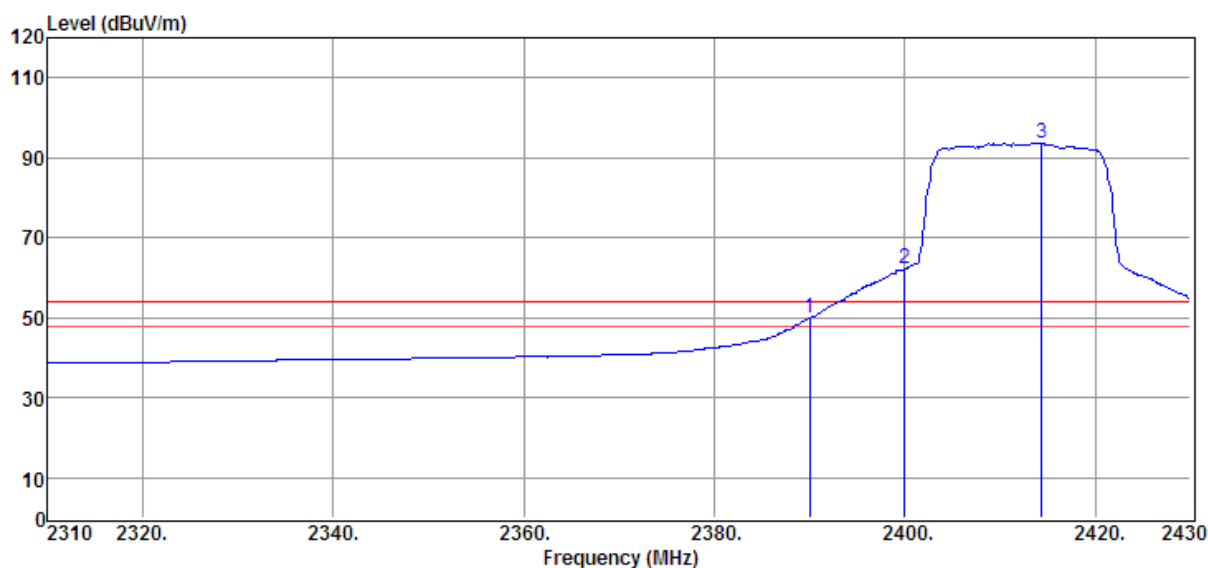
Power Supply : DC 5V from Adapter

Test Mode : IEEE802.11n HT20 CH1 2412MHz Tx

Condition : 23°C/54%

Antenna/Distance : 3115(0911)/3m/HORIZONTAL

Data : 90



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2390.00	58.35	28.70	43.48	6.47	50.04	54.00	-3.96	Average	HORIZONTAL
2	2400.00	70.29	28.93	43.49	6.47	62.20	/	/	Average	HORIZONTAL
3	2414.40	101.63	28.98	43.49	6.49	93.61	54.00	39.61	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. 2414.40MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber

E:\2012 Test Data\D\12Q0056

Test Date : 2012-04-19

Tested By : TaTa Chen

EUT : ALVO Smartpad

Model Number : ALVO SmartPAD 2

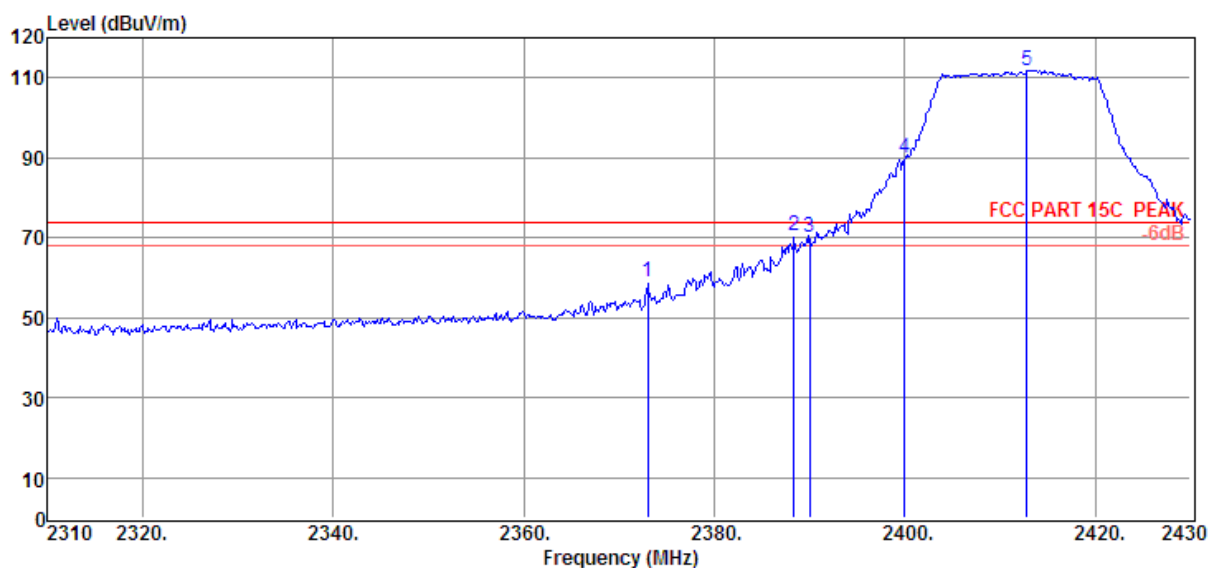
Power Supply : DC 5V from Adapter

Test Mode : IEEE802.11n HT20 CH1 2412MHz Tx

Condition : 23°C/54%

Antenna/Distance : 3115(0911)/3m/VERTICAL

Data : 91



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2373.00	67.52	28.48	43.48	6.45	58.97	74.00	-15.03	Peak	VERTICAL
2	2388.36	78.82	28.70	43.48	6.47	70.51	74.00	-3.49	Peak	VERTICAL
3	2390.00	78.58	28.70	43.48	6.47	70.27	74.00	-3.73	Peak	VERTICAL
4	2400.00	97.98	28.93	43.49	6.47	89.89	/	/	Peak	VERTICAL
5	2412.84	119.94	28.98	43.49	6.49	111.92	74.00	37.92	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. 2412.84MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber

E:\2012 Test Data\D\12Q0056

Test Date : 2012-04-19

Tested By : TaTa Chen

EUT : ALVO Smartpad

Model Number : ALVO SmartPAD 2

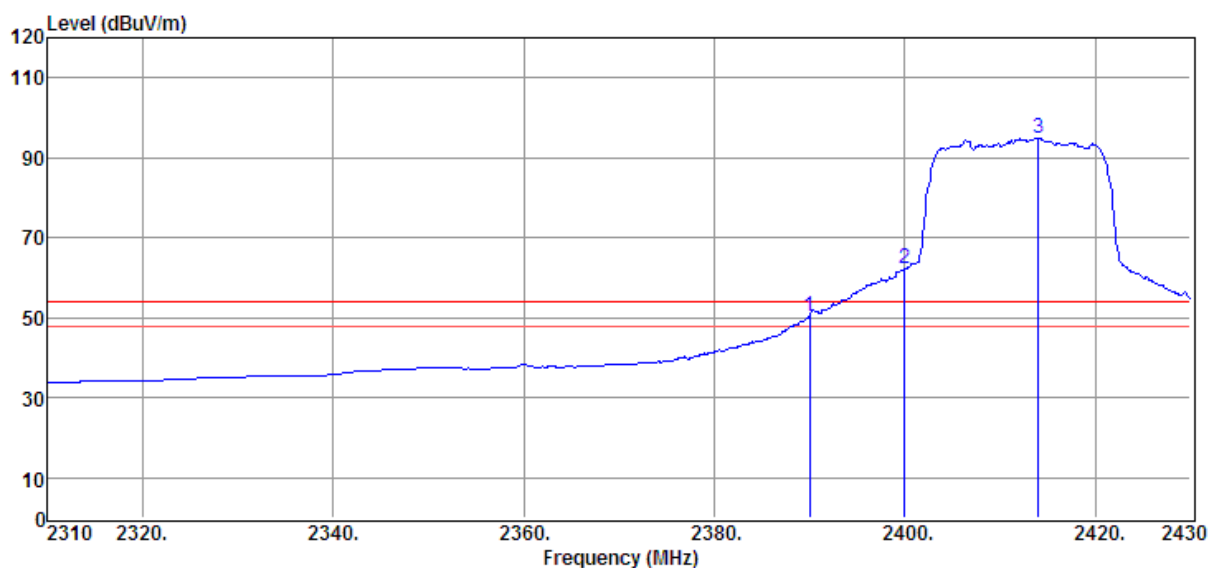
Power Supply : DC 5V from Adapter

Test Mode : IEEE802.11n HT20 CH1 2412MHz Tx

Condition : 23°C/54%

Antenna/Distance : 3115(0911)/3m/VERTICAL

Data : 92



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2390.00	58.51	28.70	43.48	6.47	50.20	54.00	-3.80	Average	VERTICAL
2	2400.00	70.22	28.93	43.49	6.47	62.13	/	/	Average	VERTICAL
3	2414.04	102.85	28.98	43.49	6.49	94.83	54.00	40.83	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

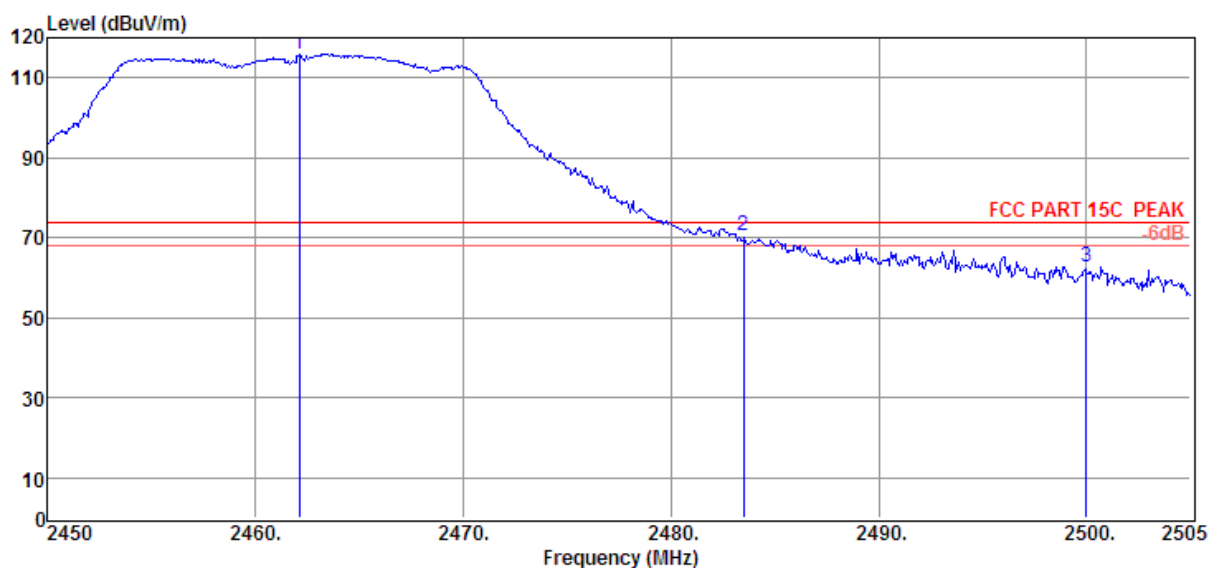
3. 2414.04MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data : 93



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2462.10	123.63	29.13	43.49	6.55	115.82	74.00	41.82	Peak	VERTICAL
2	2483.50	78.35	29.18	43.50	6.57	70.60	74.00	-3.40	Peak	VERTICAL
3	2500.00	70.33	29.25	43.50	6.59	62.67	74.00	-11.33	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

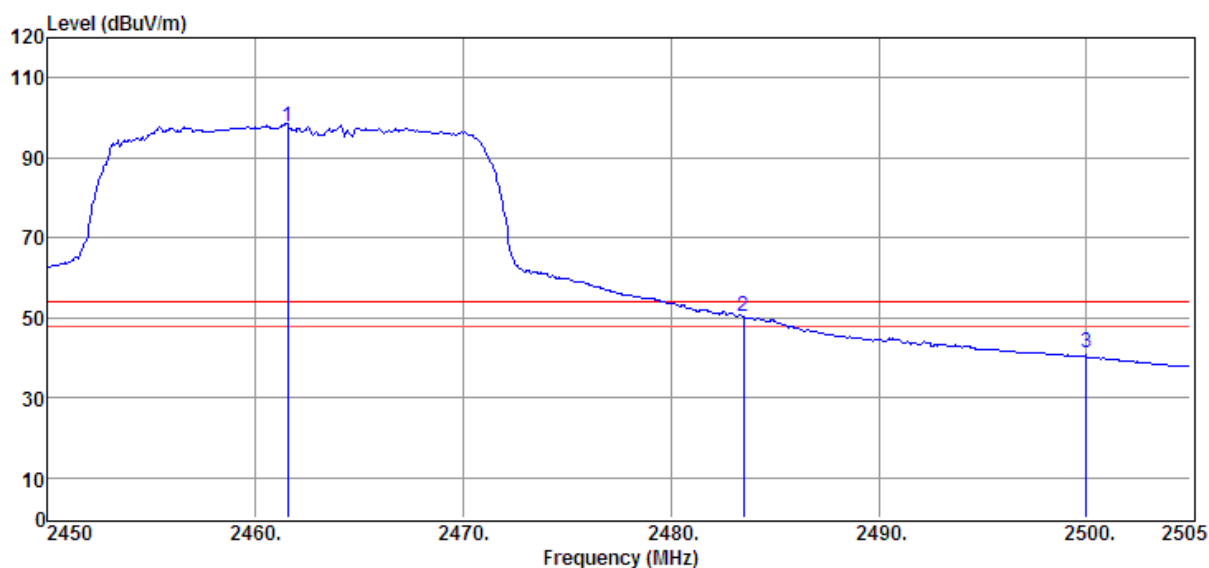
3. 2462.10MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data : 94



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2461.55	105.37	29.13	43.49	6.55	97.56	54.00	43.56	Average	VERTICAL
2	2483.50	57.94	29.18	43.50	6.57	50.19	54.00	-3.81	Average	VERTICAL
3	2500.00	48.72	29.25	43.50	6.59	41.06	54.00	-12.94	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

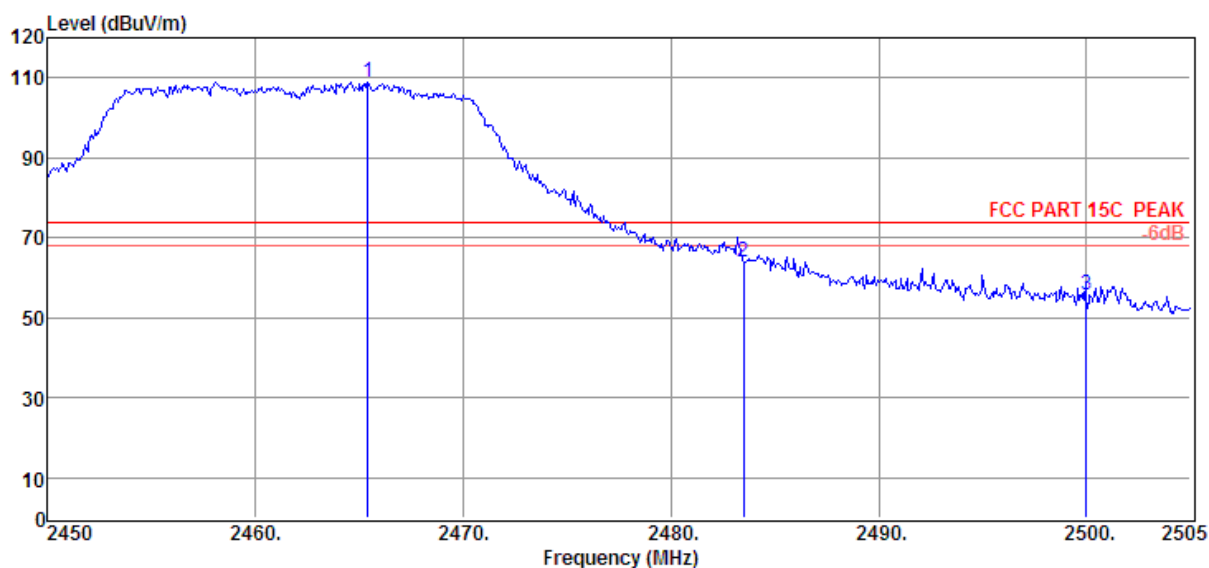
3. 2461.55MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data : 95



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2465.40	116.80	29.13	43.49	6.55	108.99	74.00	34.99	Peak	HORIZONTAL
2	2483.50	71.83	29.18	43.50	6.57	64.08	74.00	-9.92	Peak	HORIZONTAL
3	2500.00	63.39	29.25	43.50	6.59	55.73	74.00	-18.27	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

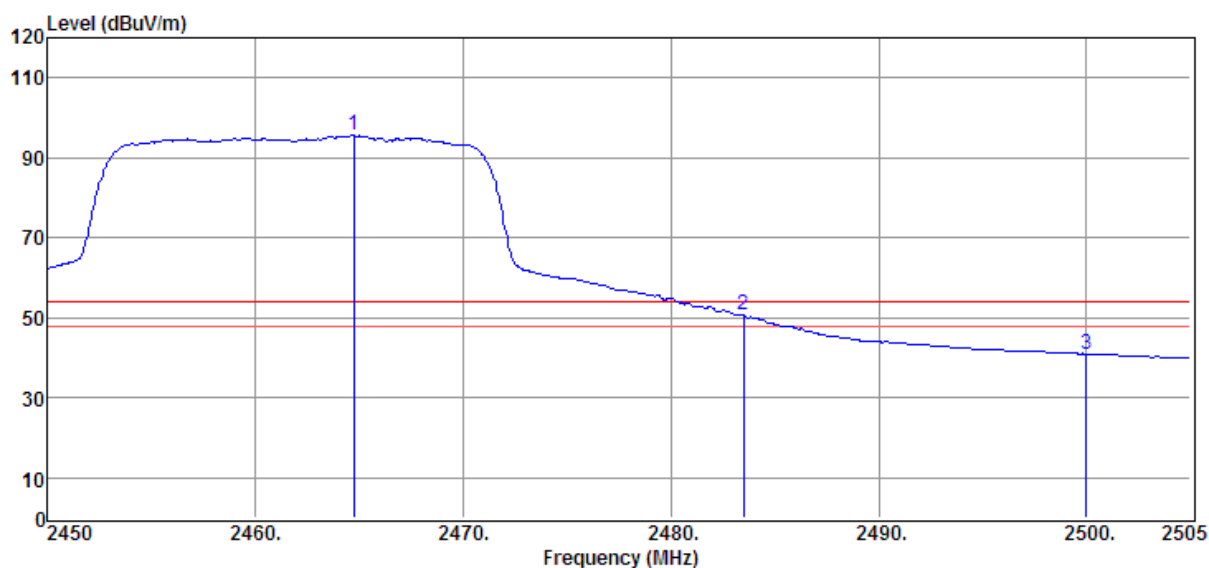
3. 2465.40MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT20 CH11 2462MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data : 96



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2464.74	103.50	29.13	43.49	6.55	95.69	54.00	41.69	Average	HORIZONTAL
2	2483.50	58.65	29.18	43.50	6.57	50.90	54.00	-3.10	Average	HORIZONTAL
3	2500.00	48.59	29.25	43.50	6.59	40.93	54.00	-13.07	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

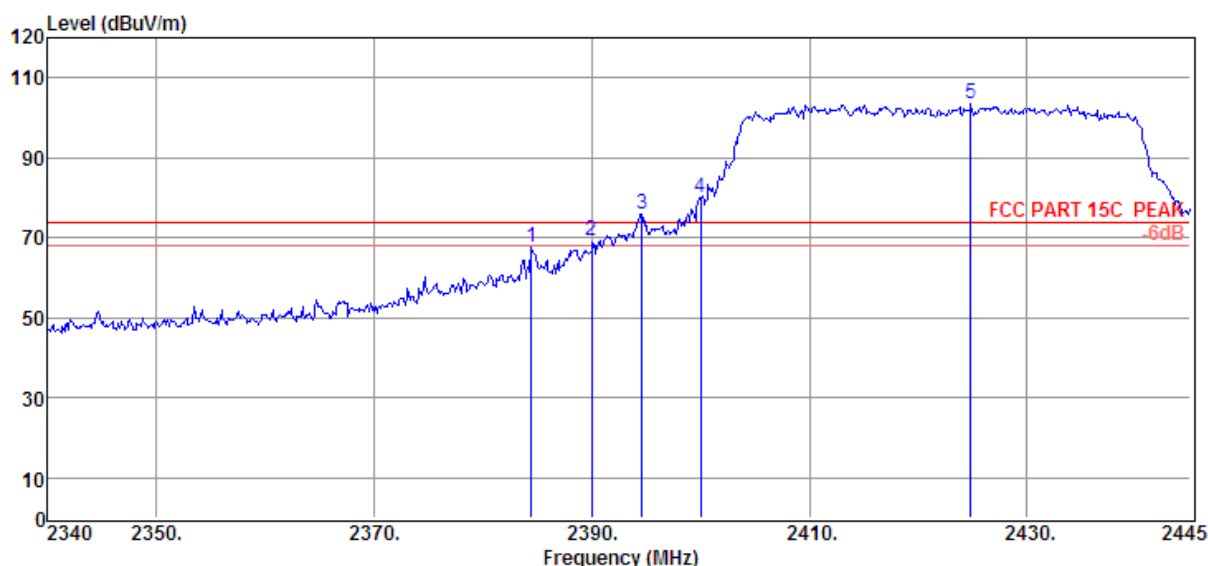
3. 2464.74MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH1 2422MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data : 97



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2384.42	75.81	28.70	43.48	6.45	67.48	74.00	-6.52	Peak	HORIZONTAL
2	2390.00	77.43	28.70	43.48	6.47	69.12	74.00	-4.88	Peak	HORIZONTAL
3	2394.60	84.04	28.93	43.48	6.47	75.96	/	/	Peak	HORIZONTAL
4	2400.00	88.16	28.93	43.49	6.47	80.07	/	/	Peak	HORIZONTAL
5	2424.84	111.30	28.98	43.49	6.51	103.30	74.00	29.30	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. 2424.84MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber

E:\2012 Test Data\D\12Q0056

Test Date : 2012-04-19

Tested By : TaTa Chen

EUT : ALVO Smartpad

Model Number : ALVO SmartPAD 2

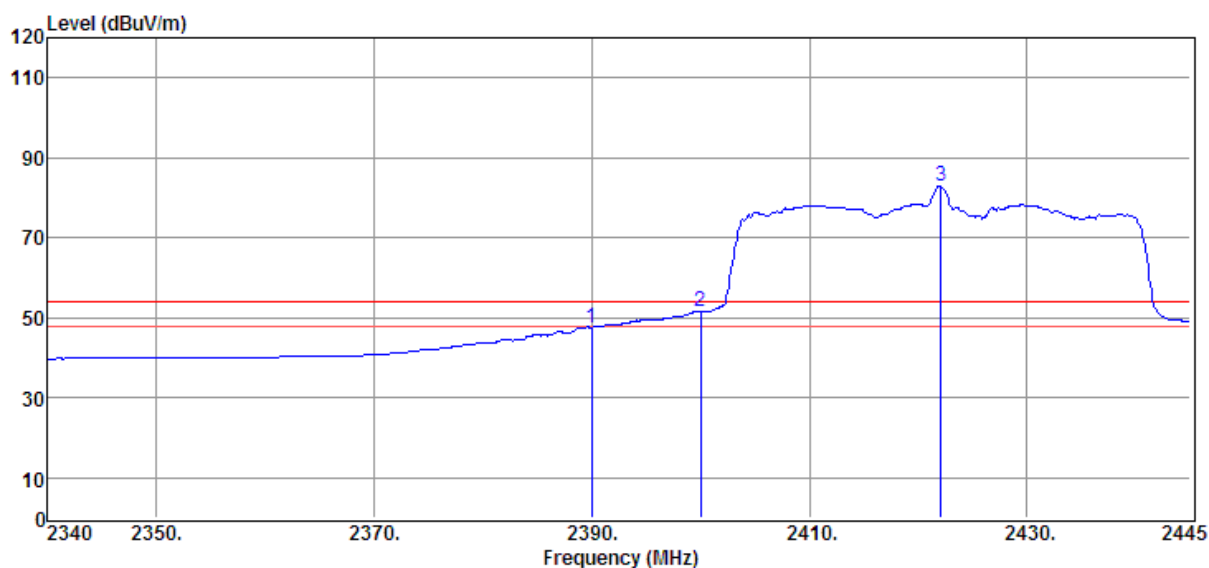
Power Supply : DC 5V from Adapter

Test Mode : IEEE802.11n HT40 CH1 2422MHz Tx

Condition : 23°C/54%

Antenna/Distance : 3115(0911)/3m/HORIZONTAL

Data : 98



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2390.00	55.81	28.70	43.48	6.47	47.50	54.00	-6.50	Average	HORIZONTAL
2	2400.00	59.66	28.93	43.49	6.47	51.57	/	/	Average	HORIZONTAL
3	2422.11	90.85	28.98	43.49	6.51	82.85	54.00	28.85	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. 2422.11MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber

E:\2012 Test Data\D\12Q0056

Test Date : 2012-04-19

Tested By : TaTa Chen

EUT : ALVO Smartpad

Model Number : ALVO SmartPAD 2

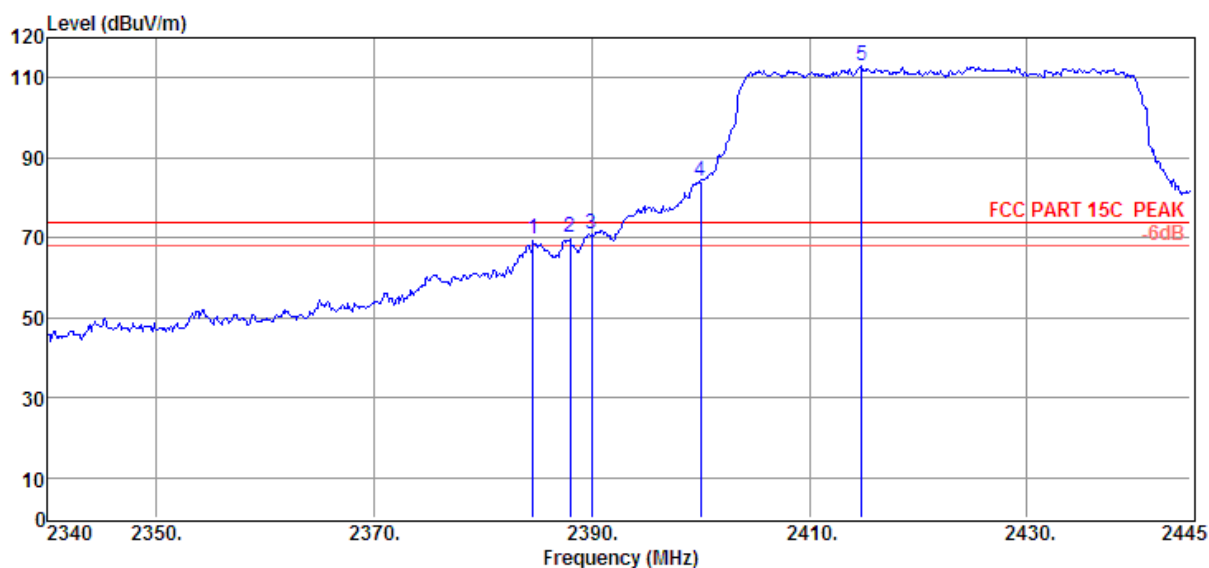
Power Supply : DC 5V from Adapter

Test Mode : IEEE802.11n HT40 CH1 2422MHz Tx

Condition : 23°C/54%

Antenna/Distance : 3115(0911)/3m/VERTICAL

Data : 99



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2384.63	78.08	28.70	43.48	6.45	69.75	74.00	-4.25	Peak	VERTICAL
2	2388.00	78.43	28.70	43.48	6.47	70.12	74.00	-3.88	Peak	VERTICAL
3	2390.00	79.05	28.70	43.48	6.47	70.74	74.00	-3.26	Peak	VERTICAL
4	2400.00	92.20	28.93	43.49	6.47	84.11	/	/	Peak	VERTICAL
5	2414.76	120.95	28.98	43.49	6.49	112.93	74.00	38.93	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. 2414.76MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber

E:\2012 Test Data\D\12Q0056

Test Date : 2012-04-19

Tested By : TaTa Chen

EUT : ALVO Smartpad

Model Number : ALVO SmartPAD 2

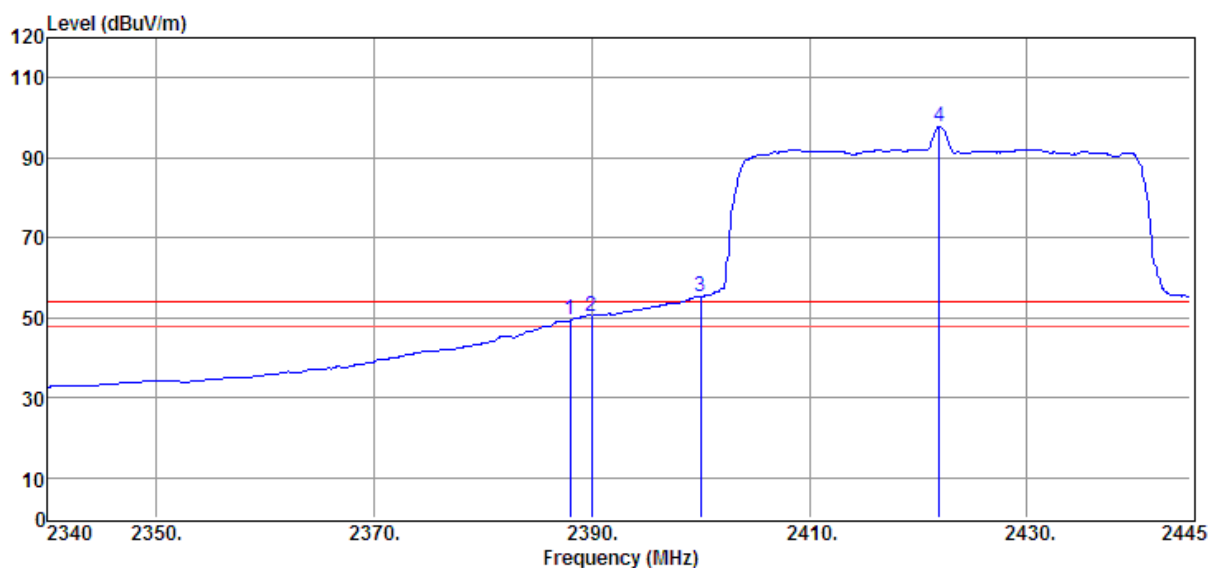
Power Supply : DC 5V from Adapter

Test Mode : IEEE802.11n HT40 CH1 2422MHz Tx

Condition : 23°C/54%

Antenna/Distance : 3115(0911)/3m/VERTICAL

Data : 100



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2388.00	57.70	28.70	43.48	6.47	49.39	54.00	-4.61	Average	VERTICAL
2	2390.00	58.81	28.70	43.48	6.47	50.50	54.00	-3.50	Average	VERTICAL
3	2400.00	63.46	28.93	43.49	6.47	55.37	/	/	Average	VERTICAL
4	2421.90	105.77	28.98	43.49	6.51	97.77	54.00	43.77	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

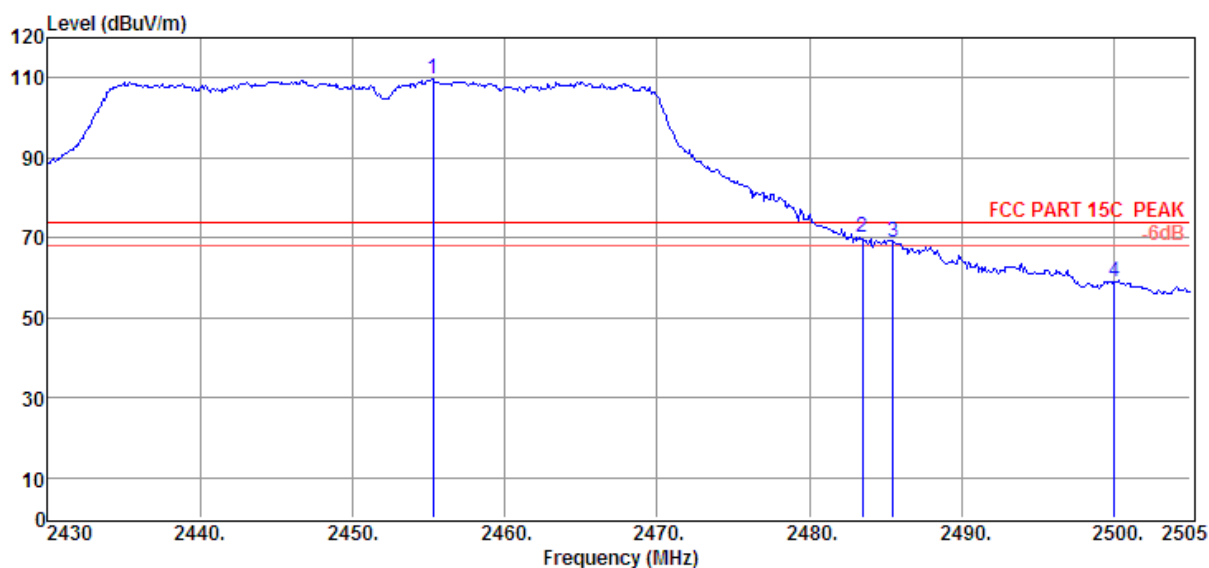
3. 2421.90MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH7 2452MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/VERTICAL

Data : 101



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2455.28	117.66	29.08	43.49	6.53	109.78	74.00	35.78	Peak	VERTICAL
2	2483.50	78.00	29.18	43.50	6.57	70.25	74.00	-3.75	Peak	VERTICAL
3	2485.50	76.81	29.18	43.50	6.57	69.06	74.00	-4.94	Peak	VERTICAL
4	2500.00	66.54	29.25	43.50	6.59	58.88	74.00	-15.12	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. 2455.28MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber

E:\2012 Test Data\D\12Q0056

Test Date : 2012-04-19

Tested By : TaTa Chen

EUT : ALVO Smartpad

Model Number : ALVO SmartPAD 2

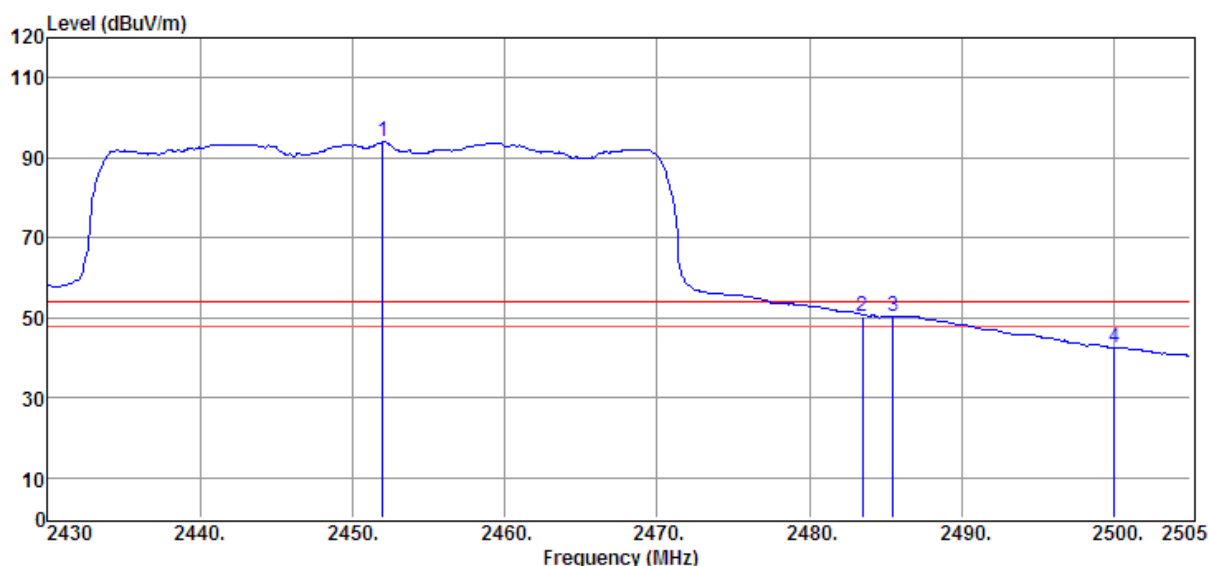
Power Supply : DC 5V from Adapter

Test Mode : IEEE802.11n HT40 CH7 2452MHz Tx

Condition : 23°C/54%

Antenna/Distance : 3115(0911)/3m/VERTICAL

Data : 102



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2451.98	101.90	29.08	43.49	6.53	94.02	54.00	40.02	Average	VERTICAL
2	2483.50	58.08	29.18	43.50	6.57	50.33	54.00	-3.67	Average	VERTICAL
3	2485.50	58.05	29.18	43.50	6.57	50.30	54.00	-3.70	Average	VERTICAL
4	2500.00	50.20	29.25	43.50	6.59	42.54	54.00	-11.46	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. 2410MHz is the fundamental emission of device and exclude to comply with the limit show in here.

3. 2451.98MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber

E:\2012 Test Data\D\12Q0056

Test Date : 2012-04-19

Tested By : TaTa Chen

EUT : ALVO Smartpad

Model Number : ALVO SmartPAD 2

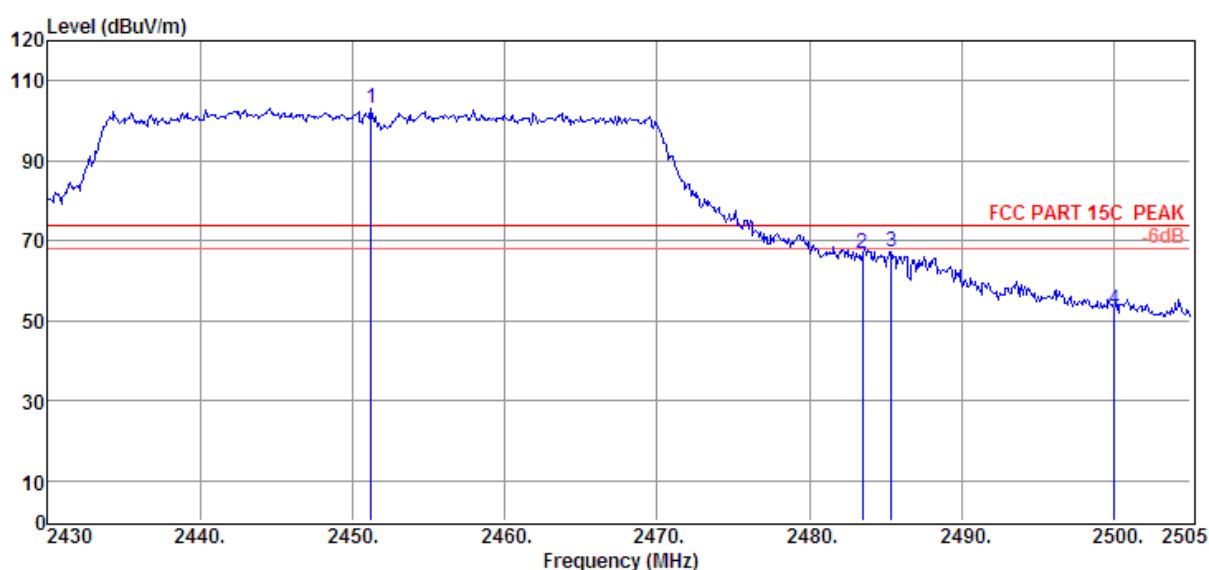
Power Supply : DC 5V from Adapter

Test Mode : IEEE802.11n HT40 CH7 2452MHz Tx

Condition : 23°C/54%

Antenna/Distance : 3115(0911)/3m/HORIZONTAL

Data : 103



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2451.23	111.11	29.08	43.49	6.53	103.23	74.00	29.23	Peak	HORIZONTAL
2	2483.50	74.64	29.18	43.50	6.57	66.89	74.00	-7.11	Peak	HORIZONTAL
3	2485.35	75.14	29.18	43.50	6.57	67.39	74.00	-6.61	Peak	HORIZONTAL
4	2500.00	60.26	29.25	43.50	6.59	52.60	74.00	-21.40	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

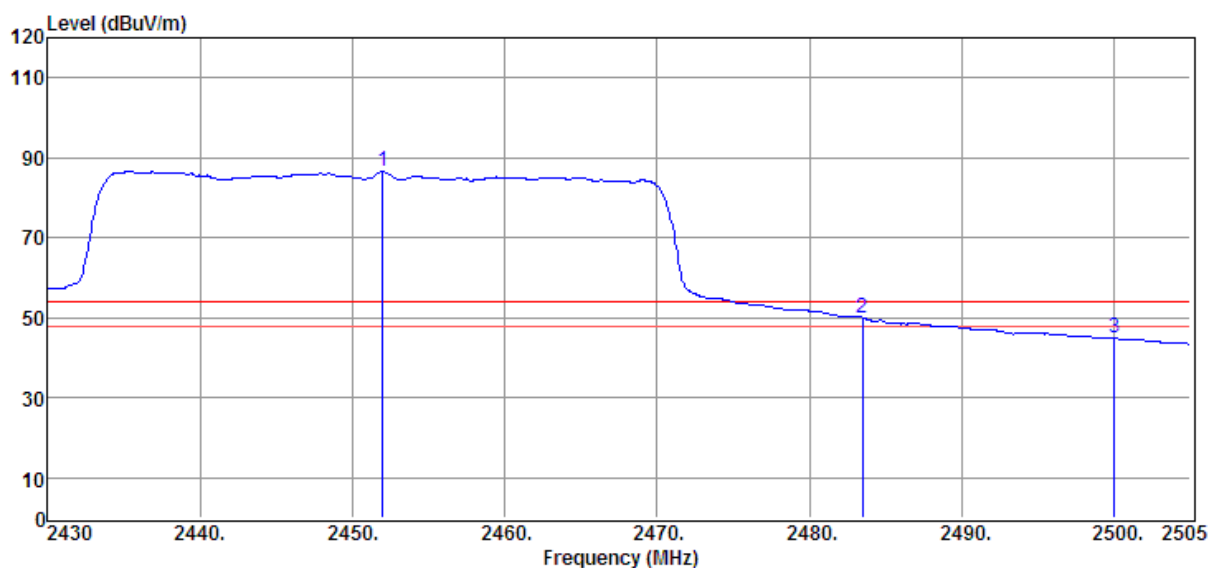
3. 2451.23MHz is the fundamental emission of device and exclude to comply with the limit show in here.



Band Edge Test Result

Test Site : 3m Chamber **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : TaTa Chen
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : DC 5V from Adapter **Test Mode** : IEEE802.11n HT40 CH7 2452MHz Tx
Condition : 23°C/54% **Antenna/Distance** : 3115(0911)/3m/HORIZONTAL

Data : 104



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2451.98	94.41	29.08	43.49	6.53	86.53	54.00	32.53	Average	HORIZONTAL
2	2483.50	57.80	29.18	43.50	6.57	50.05	54.00	-3.95	Average	HORIZONTAL
3	2500.00	52.50	29.25	43.50	6.59	44.84	54.00	-9.16	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. 2451.98MHz is the fundamental emission of device and exclude to comply with the limit show in here.

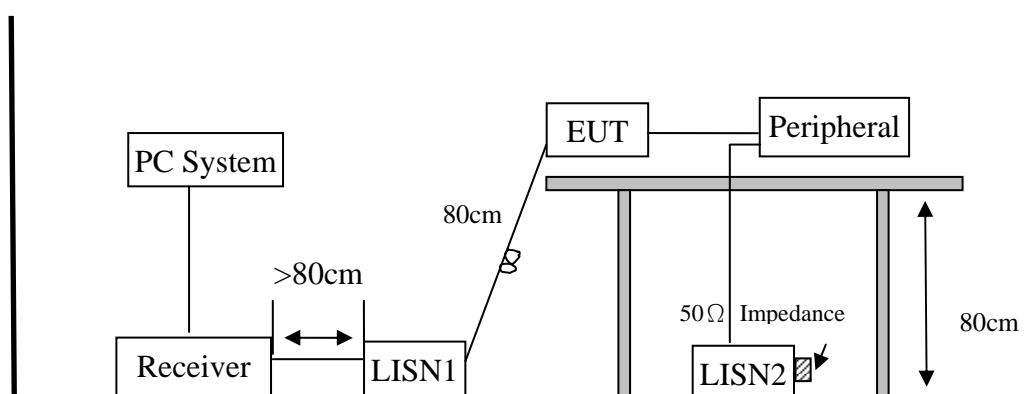


9 POWER LINE CONDUCTED EMISSION

9.1. TEST EQUIPMENT

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	R&S	ESU8	100316	2011/11/23	1 Year
2.	LISN 1	R&S	ENV216	101109	2011/11/23	1 Year
3.	LISN 2	R&S	ESH2-Z5	100309	2011/11/23	1 Year
4.	Pulse Limiter	R&S	ESH3-Z2	101242	2011/11/23	1 Year
5.	Test software	R&S	EMC32	/	/	/

9.2. BLOCK DIAGRAM OF TEST SETUP



9.3. LIMITS

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

NOTE:

- (1) The lower limit shall apply at the transition frequencies.
- (2) The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
- (3) All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.



9.4. TEST PROCEDURE

The EUT and Support equipment, if needed, was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor standing equipment, it is placed on the ground plane, which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.

All support equipment power received from a second LISN.

The EUT test program was started. Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in Item 3.1 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

Procedure of Final Test:

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 10KHz.

9.5. TEST RESULT

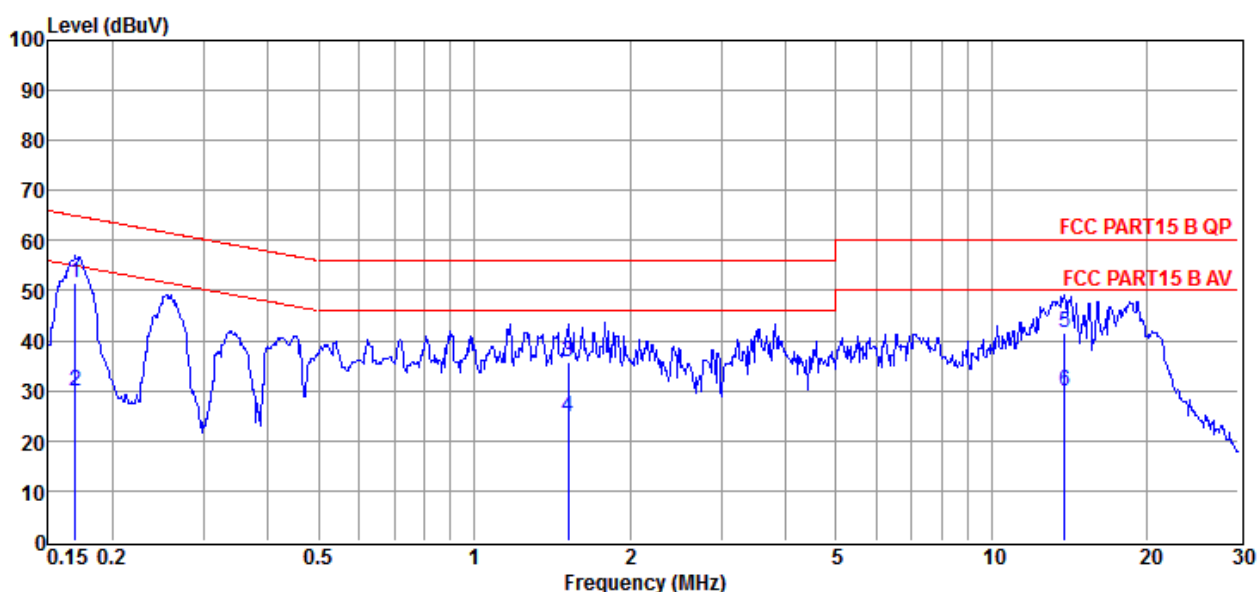
PASS. (See below detailed test result)



Conducted Emission Test Result

Test Site	: 1# Shield room	E:\2012 Test Data\D\12Q0056	
Test Date	: 2012-04-19	Tested By	: Damon_Hu
EUT	: ALVO Smartpad	Model Number	: ALVO SmartPAD 2
Power Supply	: AC 120V/60Hz	Test Mode	: TX Mode
Condition	: Temp:24.5°C,Humi:55%	LISN	: 2012 ENV216/LINE

Data : 1



Item (Mark)	Freq (MHz)	Read Level (dBμV)	LISN Factor (dB)	Cable Loss dB	Result Level (dBμV)	Limit Line (dBμV)	Over Limit (dB)	Detector	Phase
1	0.17	41.88	9.63	0.04	51.55	64.99	-13.44	QP	LINE
2	0.17	20.20	9.63	0.04	29.87	54.99	-25.12	Average	LINE
3	1.52	26.00	9.71	0.06	35.77	56.00	-20.23	QP	LINE
4	1.52	15.00	9.71	0.06	24.77	46.00	-21.23	Average	LINE
5	13.84	31.49	9.86	0.19	41.54	60.00	-18.46	QP	LINE
6	13.84	19.99	9.86	0.19	30.04	50.00	-19.96	Average	LINE

Note: 1. Result Level = Read Level + LISN Factor + Cable loss

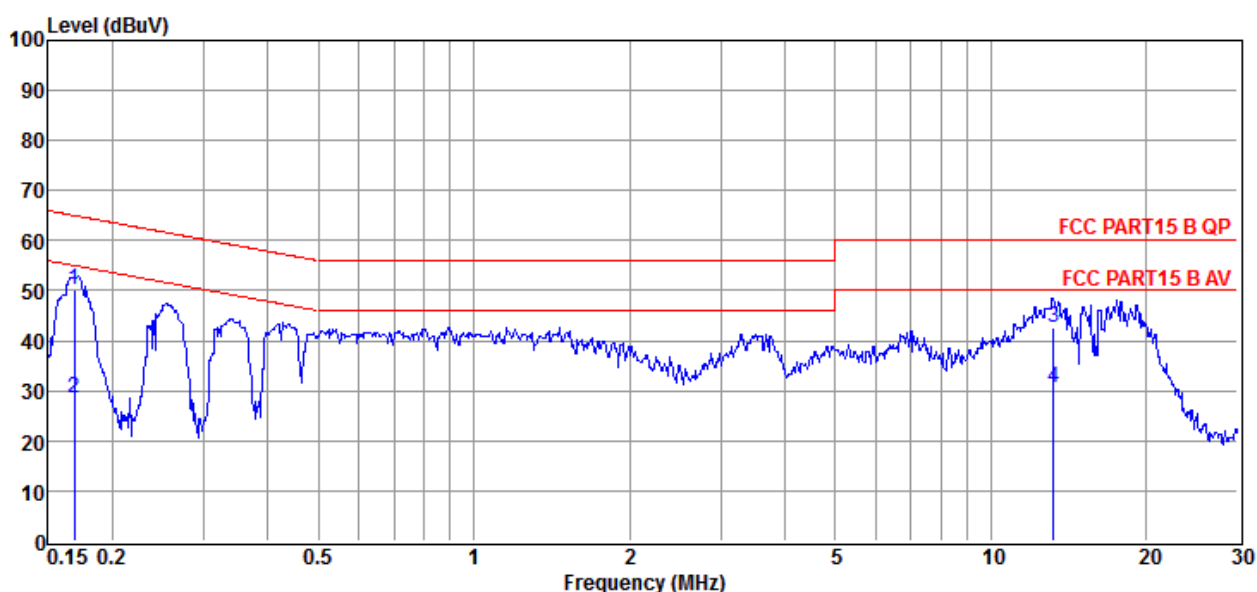
2. If QP Result comply with AV limit, AV Result is deemed to comply with AV limit



Conducted Emission Test Result

Test Site : 1# Shield room **E:\2012 Test Data\D\12Q0056**
Test Date : 2012-04-19 **Tested By** : Damon_Hu
EUT : ALVO Smartpad **Model Number** : ALVO SmartPAD 2
Power Supply : AC 120V/60Hz **Test Mode** : TX Mode
Condition : Temp:24.5°C,Humi:55% **LISN** : 2012 ENV216/NEUTRAL

Data : 2



Item (Mark)	Freq (MHz)	Read Level (dBμV)	LISN Factor (dB)	Cable Loss dB	Result Level (dBμV)	Limit Line (dBμV)	Over Limit (dB)	Detector	Phase
1	0.17	40.20	9.97	0.04	50.21	65.03	-14.82	QP	NEUTRAL
2	0.17	18.50	9.97	0.04	28.51	55.03	-26.52	Average	NEUTRAL
3	13.20	32.50	9.79	0.18	42.47	60.00	-17.53	QP	NEUTRAL
4	13.20	20.68	9.79	0.18	30.65	50.00	-19.35	Average	NEUTRAL

Note: 1. Result Level = Read Level + LISN Factor + Cable loss

2. If QP Result comply with AV limit, AV Result is deemed to comply with AV limit



10 PHOTOGRAPHS OF THE TEST CONFIGURATION





11 PHOTOGRAPHS OF EUT

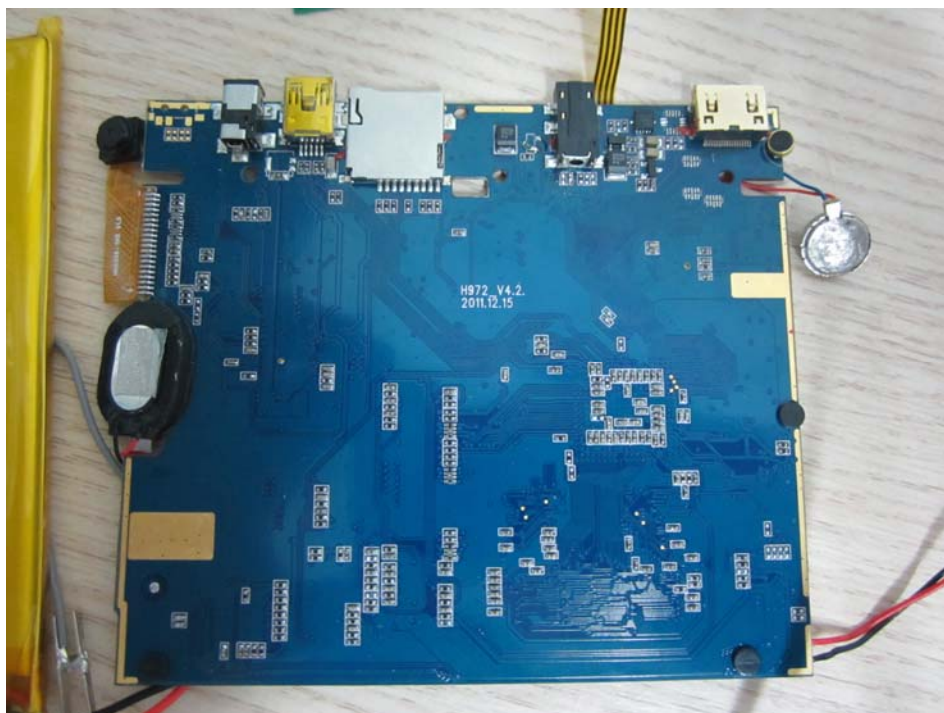
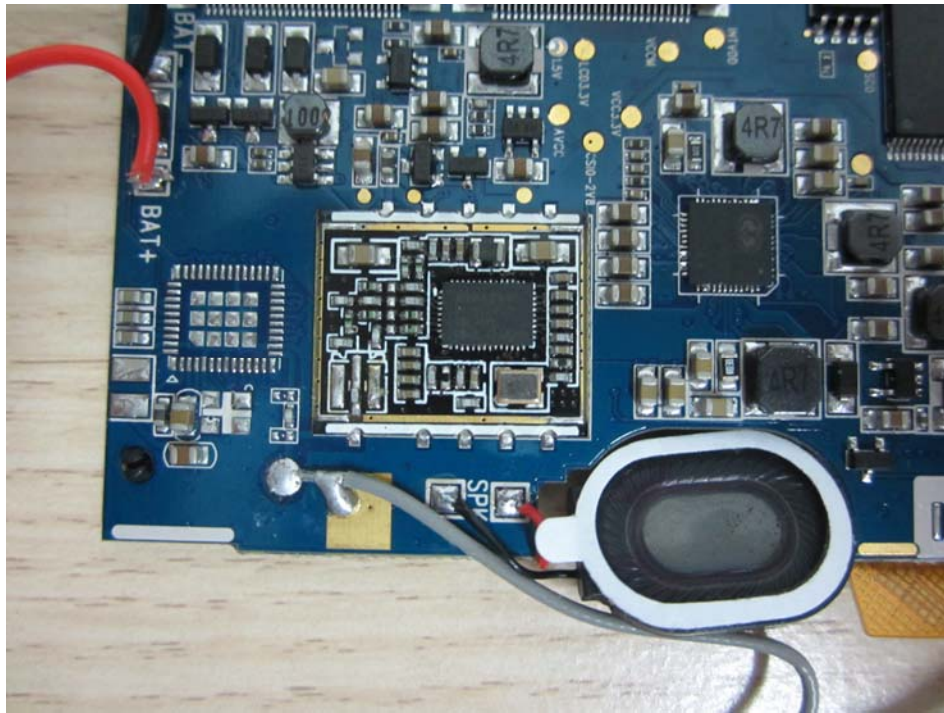


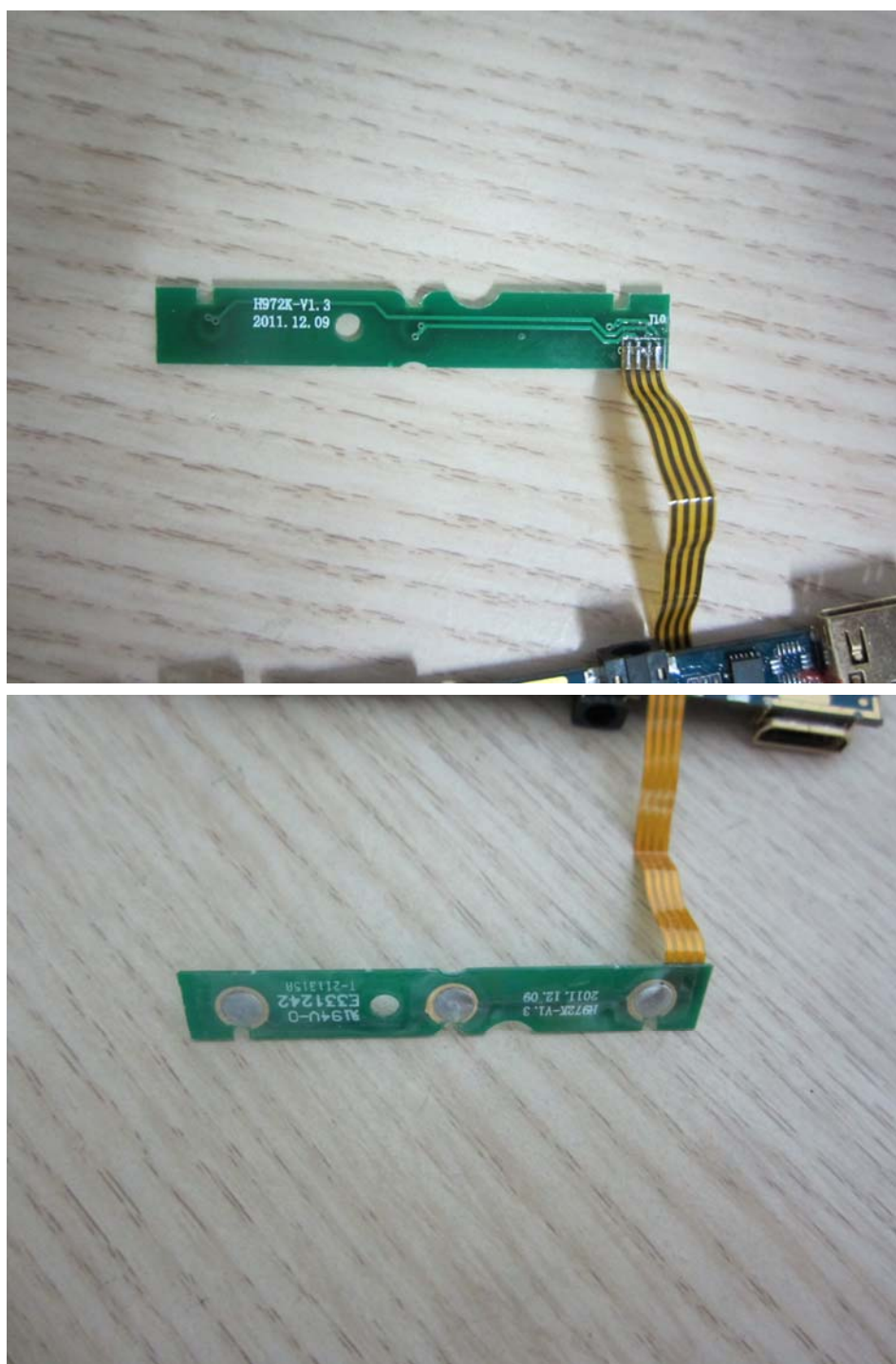


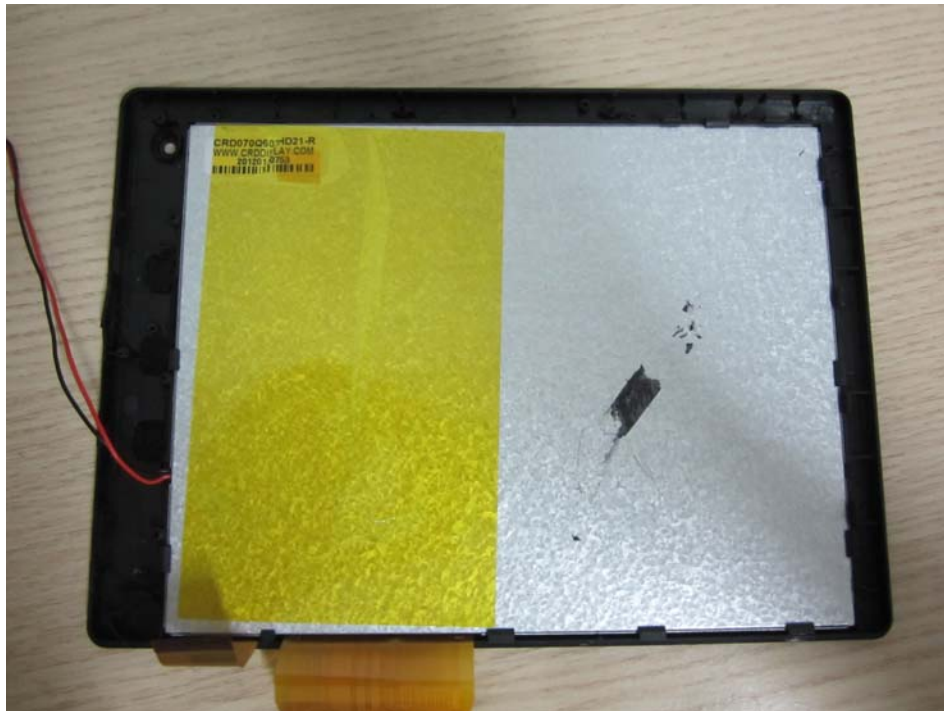


RF
Antenna













END OF REPORT